STIC Search Report
EIC 2600

STIC Database Tracking Number: 228414

TO: Lisa Hashem
Location: KNOX 7D49
Art Unit: 2614
Wednesday, June 20, 2007

Case Serial Number: 09933364

From: Sylvia Keys
Location: EIC 2600
KNX-8B59
Phone: 571-272-3534

sylvia.keys@uspto.gov

Search Notes

Dear Examiner Hashem:

Please find attached the search results for 09933364. I used the search strategy I emailed to you to edit. I searched the standard Dialog files, and the internet.

If you would like a re-focus please let me know.

Thank you.

50 RUSH 228414

STIC EIC2600
Search Request Form

USPTO

Today's Date: 6-19-07 Date Needed by: TODAY RUSH – SPE signature _____

Your Name Lisa Hashem

AU 2614 Examiner # 79192

Room # Cwx 7051 Phone _____

Serial # 09933364

Priority Date _____

Format for Search Results: PAPER EMAIL

Where have you searched?
EAST ____
NPL ____ where - IEEE, ACM, internet, other

DESCRIBE the scope of your request, such as the area of art, novelty, process or method if applicable. Specify the concepts, synonyms, keywords, acronyms, or definitions and the relationship of the concepts to each other. Please attach a copy of the backgound, abstract, and pertinent claims of the application. **ONLY specifying CLAIM 1 is not enough.**

See revised Search Request

8/20/01
455/63.1
126

H04B
PICK 1 3 7 8

STIC Searcher Sheys Phone 23534
Date picked up 6/20 Date completed 6/20
DATABASES Searched Dialog TEXT V LITIGATION _____
OTHER _____

Search and Information Resources Administration

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File 344:Chinese Patents Abs Jan 1985-2006/Jan
         (c) 2006 European Patent Office
File 347:JAPIO Dec 1976-2006/Dec(Updated 070403)
         (c) 2007 JPO & JAPIO
File 350:Derwent WPIX 1963-2007/UD=200738
         (c) 2007 The Thomson Corporation
File 371:French Patents 1961-2002/BOPI 200209
         (c) 2002 INPI.  All rts. reserv.

Set     Items   Description
S1      21762   (FEEDBACK OR FEED()BACK)(3N)(LOOP?? OR PATH OR PATHS)
S2         16   CARTESIAN()(FEEDBACK OR FEED()BACK)()LOOP??
S3     407524   ZERO?? OR POLE??
S4      28126   S3(3N)(ADJUST? OR ALTER? OR MODIF? OR CHANG?  OR SELECT? OR
              PICK OR PICKS OR PICKING OR MOVE OR MOVES OR MOVING OR VARY?-
              ?? OR VARIES)
S5         71   AU=(GAILUS, P? OR GAILUS P? OR GABATO, M? OR GABATO M? OR -
              MCCALLUM, K? OR MCCALLUM K? OR WILHITE, J? OR WILHITE J? OR P-
              AUL(2N)GAILUS OR MANUEL(2N)GABATO OR KEVIN(2N)MCCALLUM OR JEF-
              FREY(2N)WILHITE)
S6        165   S1 AND S4
S7         15   S6 AND IC=H04B?
S8          1   S2 AND S4
S9         15   S5 AND S1
S10        10   S9 AND IC=H04B?
?
```

7/3,K/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX

0015947265 - Drawing available
WPI ACC NO: 2006-478932/200649
XRPX Acc No: N2006-389470
Optical signal receiver`s decision threshold control apparatus, has decision threshold adjuster to adjust threshold based on feedback signal to balance logic ones with number of zeros corrected by forward error correction decoder
Patent Assignee: CAI Y (CAIY-I); DOMAGALA J (DOMA-I); KERFOOT F W (KERF-I); TYCO TELECOM US INC (TYCO-N); VALVO G (VALV-I)
Inventor: CAI Y; DOMAGALA J; KERFOOT F W; VALVO G
Patent Family (4 patents, 39 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
US 20060136798	A1	20060622	US 200418072	A	20041221	200649	B
CA 2517635	A1	20060621	CA 2517635	A	20050829	200649	E
EP 1675282	A2	20060628	EP 2005255359	A	20050901	200649	E
JP 2006180506	A	20060706	JP 2005367320	A	20051221	200649	E

Priority Applications (no., kind, date): US 200418072 A 20041221

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20060136798	A1	EN	9	3	
CA 2517635	A1	EN			
EP 1675282	A2	EN			
Regional Designated States,Original: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK NL PL PT RO SE SI SK TR YU					
JP 2006180506	A	JA	11		

Alerting Abstract ...error correction decoder, thus efficiently controlling the decision threshold by reducing the errors in the **feedback loop** in the sample period.

Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version
... **H04B-0010/00** ...

... **H04B-0010/02** ...

... **H04B-0010/04** ...
... **H04B-0010/06** ...

... **H04B-0010/12** ...

... **H04B-0010/14** ...

... **H04B-0010/142** ...

... **H04B-0010/152** ...

... **H04B-0010/158**
H04B-0010/152 ...

Original Publication Data by Authority

Original Abstracts:
...corrected errors. The decision threshold is adjusted to balance a number of corrected ones and **zeros.** >

Claims:
...signal to balance a number of said ones corrected by said FEC decoder with a **number** of said **zeros** corrected by said FEC decoder.

7/3,K/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX

0015947150 - Drawing available
WPI ACC NO: 2006-478817/200649
Related WPI Acc No: 2003-392535; 2003-418423; 2003-556376; 2003-585405; 2003-616083; 2003-896960; 2005-179386; 2005-194046; 2005-194047; 2005-486384
XRPX Acc No: N2006-389380
Interferer elimination method for time division multiple access system, involves predicting interferers in digital data stream and eliminating predicted interferers from discrete time sample stream
Patent Assignee: LEIPOLD D (LEIP-I); MUHAMMAD K (MUHA-I); STASZEWSKI R B (STAS-I)
Inventor: LEIPOLD D; MUHAMMAD K; STASZEWSKI R B
Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 20060135107	A1	20060622	US 2001348902	P	20011026	200649 B
			US 2002280156	A	20021025	
			US 2006339386	A	20060125	

Priority Applications (no., kind, date): US 2002280156 A 20021025; US 2001348902 P 20011026; US 2006339386 A 20060125

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20060135107	A1	EN	16	10	Related to Provisional US 2001348902
					Division of application US 2002280156

Original Titles:
Removing close-in interferers through a **feedback loop**

Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version
H04B-0001/10 ...

Original Publication Data by Authority

Original Abstracts:
...number and placement of zeroes in a filter in the sampling unit is increased and **changed through** the implementation of arbitrary-coefficient finite impulse response filters.

7/3,K/3 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX

0013856968 - Drawing available
WPI ACC NO: 2004-035317/200403
XRPX Acc No: N2004-028058
Feedback noise shaper for super audio compact disc, has pole sets defining signal and noise transfer functions, respectively with latter set having real pole at frequency above corner frequency
Patent Assignee: CIRRUS LOGIC INC (CIRR-N)

Inventor: MELANSON J L; YI H
Patent Family (5 patents, 102 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 2003100983	A1	20031204	WO 2003US14986	A	20030514	200403	B
AU 2003237833	A1	20031212	AU 2003237833	A	20030514	200443	E
EP 1506618	A1	20050216	EP 2003736592	A	20030514	200513	E
			WO 2003US14986	A	20030514		
US 7110460	B1	20060919	US 2002151322	A	20020520	200662	E
			US 2004914917	A	20040810		
US 7116721	B1	20061003	US 2002151322	A	20020520	200665	E

Priority Applications (no., kind, date): US 2002151322 A 20020520; US 2004914917 A 20040810

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2003100983	A1	EN	24	5	

National Designated States,Original: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

Regional Designated States,Original: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

AU 2003237833	A1	EN	Based on OPI patent WO 2003100983
EP 1506618	A1	EN	PCT Application WO 2003US14986 Based on OPI patent WO 2003100983

Regional Designated States,Original: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR

US 7110460	B1	EN	Continuation of application US 2002151322

...NOVELTY - The shaper has a pole set defining a signal transfer function of a **selected** corner frequency. Another **pole** set having a **pole** at twice the **selected** corner frequency defines a noise transfer function. The former pole set comprises two poles with...

Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version
... **H04B-0014/06**
... **H04B-0014/02**

Original Publication Data by Authority

Original Abstracts:
...pole set defining a signal transfer function (502, 504) of a selected corner frequency and **a** second **pole** set having at least one pole at a frequency **at** least twice the **selected** corner frequency defining a noise transfer function (502, 504...

...function of a selected corner frequency and a second pole set having at least one **pole** at **a** frequency at least twice the **selected** corner frequency defining a noise transfer function...

...pole a une frequence qui vaut au moins le double de la frequence de coin **selectionnee** definissant une fonction **de** transfert de bruit (502, 504).
Claims:
...least three stages for modulating an input signal;a quantizer for quantizing an output signal **from** the **loop** -filter; and **feedback** circuitry **providing** **feedback** from an output of the quantizer to the **loop** -filter stages, the **feedback** to the **loop** -filter stages weighted by

a set of coefficients implementing a first pole set defining a signal transfer function of a selected corner **frequency** and a second **pole** set having **at** least one pole at a frequency at least twice the **selected corner** frequency defining a noise transfer function.

7/3,K/4 (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX

0013806337 - Drawing available
WPI ACC NO: 2003-104002/200309
XRPX Acc No: N2003-082951
Power control calibration e.g. for CDMA system, has feedback circuit generating signal indicative of transmit power with signal compared with desired transmit power level
Patent Assignee: QUALCOMM INC (QUAL-N); SAHOTA G S (SAHO-I)
Inventor: SAHOTA G S; SAHOTA K
Patent Family (10 patents, 99 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 2003001701	A2	20030103	WO 2002US20377	A	20020625	200309	B
US 20030002452	A1	20030102	US 2001301184	P	20010626	200315	E
			US 2002177057	A	20020620		
EP 1400033	A2	20040324	EP 2002756324	A	20020625	200421	E
			WO 2002US20377	A	20020625		
AU 2002322339	A1	20030108	AU 2002322339	A	20020625	200461	E
US 6819938	B2	20041116	US 2001301184	P	20010626	200475	E
			US 2002177057	A	20020620		
JP 2005502233	W	20050120	WO 2002US20377	A	20020625	200508	E
			JP 2003507979	A	20020625		
US 20050048938	A1	20050303	US 2001301184	P	20010626	200517	E
			US 2002177057	A	20020620		
			US 2004964404	A	20041012		
US 20050059424	A1	20050317	US 2001301184	P	20010626	200521	E
			US 2002177057	A	20020620		
			US 2004964118	A	20041012		
AU 2002322339	A8	20051013	AU 2002322339	A	20020625	200611	E
US 7076266	B2	20060711	US 2001301184	P	20010626	200646	E
			US 2002177057	A	20020620		
			US 2004964404	A	20041012		

Priority Applications (no., kind, date): US 2004964404 A 20041012; US 2004964118 A 20041012; US 2001301184 P 20010626; US 2002177057 A 20020620

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2003001701	A2	EN	38	7	
National Designated States,Original: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW					
Regional Designated States,Original: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW					
US 20030002452	A1	EN			Related to Provisional US 2001301184
EP 1400033	A2	EN			PCT Application WO 2002US20377 Based on OPI patent WO 2003001701
Regional Designated States,Original: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
AU 2002322339	A1	EN			Based on OPI patent WO 2003001701
US 6819938	B2	EN			Related to Provisional US 2001301184
JP 2005502233	W	JA	64		PCT Application WO 2002US20377 Based on OPI patent WO 2003001701

US 20050048938	A1	EN	Related to Provisional US 2001301184 Continuation of application US 2002177057 Continuation of patent US 6819938
US 20050059424	A1	EN	Related to Provisional US 2001301184 Division of application US 2002177057 Division of patent US 6819938
AU 2002322339	A8	EN	Based on OPI patent WO 2003001701
US 7076266	B2	EN	Related to Provisional US 2001301184 Continuation of application US 2002177057 Continuation of patent US 6819938

Class Codes
International Classification (Main): **H04B-001/04** ...

... **H04B-007/005**
... (Additional/Secondary): **H04B-001/40** ...

... **H04B-017/00** ...

... **H04B-007/26**
International Classification (+ Attributes)
IPC + Level Value Position Status Version
H04B-0017/00 ...

... **H04B-0007/00** ...

... **H04B-0007/005**
H04B-0017/00 ...
... **H04B-0007/005**

Original Publication Data by Authority

Original Abstracts:
...the inherent nonlinearities in the gain control input of a variable gain amplifier (VGA). In **one** embodiment, a **feedback** circuit generates ... power. This signal is compared with a desired transmit power level, which comprises an open- **loop** gain component and a closed-loop gain component. The desired transmit power level is compared...

...in the gain control input of a variable gain amplifier (VGA). In one embodiment, a **feedback** circuit **generates** a signal indicative of the transmit power. This signal is compared with a desired transmit power level, which comprises an open-loop gain component and a **closed - loop** gain component. The desired transmit power level is compared with the actual transmit power level...

...a desired transmit power level, which comprises an open-loop gain component and a closed- **loop** gain component. The **desired** transmit power level is compared with the actual transmit power level and an error signal ...
Claims:
...is coupled to the RF stage via an intermediate frequency (IF) stage wherein the oscillator **frequency** is **selected** to permit the signal generated by the mixer to match an intermediate frequency (IF) of...

7/3,K/5 (Item 5 from file: 350)
DIALOG(R)File 350:Derwent WPIX

0011040781 - Drawing available

WPI ACC NO: 2001-105109/200112
XRPX Acc No: N2001-077996
Frequency changer for e.g. use in zero intermediate frequency (ZIF) digital tuner such as for digital direct broadcasting by satellite (DBS) receiver system uses phase-locked oscillators in a loop.
Patent Assignee: MITEL SEMICONDUCTOR LTD (MTLC); ZARLINK SEMICONDUCTOR LTD (ZARL-N)
Inventor: COWLEY N P; MUDD M S J
Patent Family (3 patents, 2 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
GB 2350948	A	20001213	GB 199912873	A	19990604	200112 B
GB 2350948	B	20031001				200367 E
US 6895063	B1	20050517	US 2000590332	A	20000608	200535 NCE

Priority Applications (no., kind, date): US 2000590332 A 20000608; GB 199912873 A 19990604

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
GB 2350948	A	EN	19	5	

Alerting Abstract ...multiplying with input signal has very low phase noise and is resistant to injection pulling. **Feedback** bandwidth of control **loop** for the first oscillator can be arranged to be high enough to cover the bandwidth...

Class Codes
...International Classification (Main): **H04B-001/16**
... (Additional/Secondary): **H04B-001/30**

Original Publication Data by Authority

Original Abstracts:
A zero or near **zero IF** frequency **changer for** use in **a** digital tuner comprises multipliers which receive the RF input signal from an input. The multipliers...
Claims:
1. A digital tuner comprising a single frequency changer of **one** of a zero intermediate **frequency changer** and **a** near- **zero** intermediate **frequency changer** , said **frequency changer** comprising: an oscillator arrangement; a first multiplier having a first input for receiving an input ...

7/3,K/6 (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX

0009897148 - Drawing available
WPI ACC NO: 2000-195667/200017
XRPX Acc No: N2000-144707
Broad band, multiband radar detector for sensing presence of police radar
Patent Assignee: BEL-TRONICS CO (BELT-N); BELTRONICS USA INC (BELT-N)
Inventor: MARTINSON G D
Patent Family (7 patents, 84 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
WO 2000008480	A2	20000217	WO 1999CA686	A	19990729	200017 B
AU 199950224	A	20000228	AU 199950224	A	19990729	200030 E
US 6069580	A	20000530	US 1998127965	A	19980803	200033 E
EP 1145030	A2	20011017	EP 1999934427	A	19990729	200169 E
			WO 1999CA686	A	19990729	
CA 2337077	C	20030708	CA 2337077	A	19990729	200352 E

			WO 1999CA686	A	19990729		
EP 1145030	B1	20041201	EP 1999934427	A	19990729	200479	E
			WO 1999CA686	A	19990729		
DE 69922414	E	20050105	DE 69922414	A	19990729	200505	E
			EP 1999934427	A	19990729		
			WO 1999CA686	A	19990729		

Priority Applications (no., kind, date): US 1998127965 A 19980803

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2000008480	A2	EN	43	1	

National Designated States,Original: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZA ZW

Regional Designated States,Original: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW

AU 199950224	A	EN	Based on OPI patent WO 2000008480
EP 1145030	A2	EN	PCT Application WO 1999CA686
			Based on OPI patent WO 2000008480

Regional Designated States,Original: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

CA 2337077	C	EN	PCT Application WO 1999CA686
			Based on OPI patent WO 2000008480
EP 1145030	B1	EN	PCT Application WO 1999CA686
			Based on OPI patent WO 2000008480

Regional Designated States,Original: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DE 69922414	E	DE	Application EP 1999934427
			PCT Application WO 1999CA686
			Based on OPI patent EP 1145030
			Based on OPI patent WO 2000008480

Alerting Abstract ...NOVELTY - A local oscillator (24) is operated by a phase lock **loop** **feedback** circuit (28) under the control of a microprocessor (18) so that its output frequency might...
...28 Phase lock **loop** **feedback** circuit

Class Codes
(Additional/Secondary): **H04B-001/26** ...

... **H04B-017/00**

Original Publication Data by Authority

Original Abstracts:
...of which has a frequency synthesized local oscillator which is governed by a phase lock **loop** **feedback** circuit under **the** **control** of a microprocessor, so that the output frequency of the second local oscillator may be...

...of which has a frequency synthesized local oscillator which is governed by a phase lock **loop** **feedback** circuit under the control of a microprocessor, so that the output frequency of **the** **second** local oscillator may be varied by an amount equal to +/-fadj. The first local oscillator...
...of which has a frequency synthesized local oscillator which is governed by a phase lock **loop** **feedback** circuit under the control of a microprocessor, so that the output frequency of the second local oscillator **may** **be** varied by an amount equal to +/- fadj. The first local oscillator is also under the...
Claims:
...and an output port from which signals at a third intermediate frequency

are derived for **further** signal handling; **a** second single pole, double throw switch being interposed between said second mixer and said third...

7/3,K/7 (Item 7 from file: 350)
DIALOG(R)File 350:Derwent WPIX

0009776352 - Drawing available
WPI ACC NO: 2000-064337/200006
Related WPI Acc No: 2000-064338; 2000-064339; 2000-226082; 2000-593597; 2002-327702; 2002-498523; 2002-739474; 2003-219099; 2003-265604; 2003-895412
XRPX Acc No: N2000-050470
Data communication device with auto-negotiation system that supports multiple ports
Patent Assignee: ADVANCED MICRO DEVICES INC (ADMI)
Inventor: GUO B; LAU D; LO W; MAHALE D; RUNALDUE T; RUNALDUE T J; TSINKER V ; TSINKER V M
Patent Family (9 patents, 26 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
EP 963079	A2	19991208	EP 1999302935	A	19990415	200006	B
US 6060890	A	20000509	US 199882183	P	19980417	200030	E
			US 1998205585	A	19981204		
US 6104236	A	20000815	US 199882183	P	19980417	200041	E
			US 1998170427	A	19981013		
US 6115389	A	20000905	US 199882183	P	19980417	200044	E
			US 1999291030	A	19990414		
US 6141350	A	20001031	US 199882183	P	19980417	200057	E
			US 1999291036	A	19990414		
US 6160436	A	20001212	US 199882183	P	19980417	200067	E
			US 1999281905	A	19990331		
US 6150875	A	20001121	US 199882183	P	19980417	200101	E
			US 1998140833	A	19980826		
US 6222392	B1	20010424	US 199882183	P	19980417	200125	E
			US 1999232711	A	19990119		
US 6842481	B1	20050111	US 199882183	P	19980417	200505	E
			US 1998170221	A	19981013		

Priority Applications (no., kind, date): US 1999291036 A 19990414; US 1999281905 A 19990331; US 1999232711 A 19990119; US 1998205585 A 19981204; US 1998170427 A 19981013; US 1998170221 A 19981013; US 1998140833 A 19980826; US 199882183 P 19980417; US 1999291030 A 19990414

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
EP 963079	A2	EN	11	5	
Regional Designated States,Original: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					
US 6060890	A	EN			Related to Provisional US 199882183
US 6104236	A	EN			Related to Provisional US 199882183
US 6115389	A	EN			Related to Provisional US 199882183
US 6141350	A	EN			Related to Provisional US 199882183
US 6160436	A	EN			Related to Provisional US 199882183
US 6150875	A	EN			Related to Provisional US 199882183
US 6222392	B1	EN			Related to Provisional US 199882183
US 6842481	B1	EN			Related to Provisional US 199882183

Class Codes
...International Classification (Main): **H04B-001/10** ...

... **H04B-003/36** ...

... **H04B-007/212**

Original Publication Data by Authority

Original Abstracts:
...pole, and a single zero, single pole low pass filter, that eliminates the necessity of **feedback loops** or operational amplifiers. **The tunable** single zero high-pass filter includes a single zero impedance circuit, and first and second...includes a transconductance-controlled, tunable single zero, single pole filter that eliminates the necessity of **feedback loops** or operational amplifiers. **The equalizer** includes a first MOS transistor having a first size (S1) and a gate for receiving...

...input voltage signals, where the four current signals can be selectively combined based on whether **the zero** is at a lower frequency than the pole...

7/3,K/8 (Item 8 from file: 350)

0008157833 - Drawing available
WPI ACC NO: 1997-259244/199723
XRPX Acc No: N1997-214333
Transmitter e.g. for cellular and cordless telephones - has feedback loop **with coupler which derives portion of power amplifier output signal and supplies it to first and second phase-related** feedback paths
Patent Assignee: PHILIPS ELECTRONICS NV (PHIG); PHILIPS NORDEN AB (PHIG); US PHILIPS CORP (PHIG)
Inventor: WILSON J F
Patent Family (4 patents, 19 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 1997015980	A1	19970501	WO 1996IB1132	A	19961022	199723	B
EP 803147	A1	19971029	EP 1996932784	A	19961022	199748	E
			WO 1996IB1132	A	19961022		
US 5793817	A	19980811	US 1996735629	A	19961023	199839	E
JP 10512133	W	19981117	WO 1996IB1132	A	19961022	199905	E
			JP 1997516440	A	19961022		

Priority Applications (no., kind, date): GB 199521769 A 19951024
Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 1997015980	A1	EN	22	4	
National Designated States,Original: JP					
Regional Designated States,Original: AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
EP 803147	A1	EN			PCT Application WO 1996IB1132 Based on OPI patent WO 1997015980
Regional Designated States,Original: DE FR GB					
JP 10512133	W	JA	21		PCT Application WO 1996IB1132 Based on OPI patent WO 1997015980

...has feedback loop **with coupler which derives portion of power amplifier output signal and supplies it to first and second phase-related** feedback paths

Alerting Abstract ...to a transmission frequency. A power amplifier is coupled to the frequency up-convertor. A **feedback loop** includes an element which drives a portion of the amplitude of the power amplifier output...

...input of the frequency up-convertor. A device subtracts the DC offset

from the linearisation **loop feedback** error signal and applies the difference signal obtained to the frequency up-convertor...

Class Codes
... (Additional/Secondary): **H04B-001/02** ...

... **H04B-001/04**

Original Publication Data by Authority

Original Abstracts:
...converting means and for supplying the combined signal to power amplifying means (36, 38). A **feedback loop** is provided **which has** a coupler (54) for deriving a portion of the power amplifier output signal and supplying it to first and second phase related **feedback paths** . Each of **the feedback paths** comprises frequency **down - converting** means (56, 58, 60). Means (42 to 52) are provided for measuring the dc offsets at the respective inputs of the frequency up-converting means (28, 30) when the **feedback** around the linearisation **loop** is reduced to **zero** without **altering** the **dc** offsets **produced** at the outputs of the frequency down-converting means (56, 58, 60). Subtracting means (20, 22, 68,70) subtract the measured dc offsets from the **feedback loop** error signals.
...

...respective frequency up-converters and for supplying the combined signal to a power amplifier. A **feedback loop** is provided which has a coupler for **deriving a** portion of the power amplifier output signal and supplying it to first and second phase related **feedback paths** . Each of the **feedback paths** comprises frequency **down - converters** . The dc offset **is measured** at the respective inputs of the frequency up-converters when the **feedback** around the linearization **loop** is reduced to **zero without altering** the dc **offsets** produced at the **outputs** of **the** frequency down-converters. Subtractors subtract the measured dc offsets from the **feedback loop** error signals.

...

...converting means and for supplying the combined signal to power amplifying means (36, 38). A **feedback loop** is provided which has a coupler (54) for deriving a portion of **the power** amplifier output signal and supplying it to first and second phase related **feedback paths** . Each of the **feedback paths** comprises frequency down-converting means (56, 58, **60**). **Means** (42 to 52) **are provided** for measuring the dc offsets at the respective inputs of the frequency up-converting means (28, 30) when the **feedback** around the linearisation **loop** is reduced to **zero** without **altering** the dc offsets **produced** at the outputs **of** the frequency down- **converting** means (**56** , 58, 60). Subtracting means (20, 22, 68,70) subtract the measured dc offsets from the **feedback loop** error signals.
Claims:
...to a transmission frequency. A power amplifier is coupled to the frequency up-convertor. A **feedback loop** includes an element which drives a portion of the amplitude of the power amplifier output...

...input of the frequency up-convertor. A device subtracts the DC offset from the linearisation **loop feedback** error signal and applies the difference signal obtained to the frequency up-convertor...

...coupled to said subtracting means;power amplifier means coupleable to said frequency-up converting means; **feedback loop** means for coupling out a portion of an **output signal** outputted from said power amplifier means;frequency-down converting means, coupled to said **feedback loop** means and said subtracting means, for frequency down converting said **portion of** said output signal;dc offset determining means having an

input coupleable to said input of...

7/3,K/9 (Item 9 from file: 350)
DIALOG(R)File 350:Derwent WPIX

0007711630 - Drawing available
WPI ACC NO: 1996-334190/199633
XRPX Acc No: N1996-281598
Quadrature signal generating circuit e.g. for personal communication system - has quadrature signals which are fed to phase detector which provides feedback signal to comparator for adjustment of quadrature signals
Patent Assignee: PHILIPS ELECTRONICS NV (PHIG); PHILIPS NORDEN AB (PHIG)
Inventor: BEHBAHANI F B; FOTOWAT-AHAMDY A; HAJIMIRI A; NAVID N S
Patent Family (5 patents, 19 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 1996021270	A1	19960711	WO 1995IB1141	A	19951220	199633	B
EP 753216	A1	19970115	EP 1995938580	A	19951220	199708	E
			WO 1995IB1141	A	19951220		
KR 1997701952	A	19970412	WO 1995IB1141	A	19951220	199817	E
			KR 1996704891	A	19960830		
CN 1146259	A	19970326	CN 1995192565	A	19951220	200106	E
JP 2002515190	W	20020521	WO 1995IB1141	A	19951220	200236	E
			JP 1996520825	A	19951220		

Priority Applications (no., kind, date): US 1994366550 A 19941230

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 1996021270	A1	EN	18	5	
National Designated States,Original: CN JP KR					
Regional Designated States,Original: AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE					
EP 753216	A1	EN	1		PCT Application WO 1995IB1141 Based on OPI patent WO 1996021270
Regional Designated States,Original: DE FR GB IT					
KR 1997701952	A	KO			PCT Application WO 1995IB1141 Based on OPI patent WO 1996021270
JP 2002515190	W	JA	21		PCT Application WO 1995IB1141 Based on OPI patent WO 1996021270

Alerting Abstract ...level input to an integrator (18). The integrator output provides the reference voltage as a **feedback loop** .

Class Codes
...International Classification (Main): **H04B-001/69**
Original Publication Data by Authority

Original Abstracts:
...a low-pass filter, and through an integrator, to obtain an adjusted reference voltage VR. **VR adjusts** the **zero** crossing **of** the **comparator** to bring the two signals into quadrature relationship...

...low-pass filter, and through an integrator, to obtain an adjusted reference voltage VR. VR **adjusts** the **zero** crossing **of** the comparator to bring **the** two **signals** into quadrature relationship.
Claims:
...level input to an integrator (18). The integrator output provides the reference voltage as a **feedback loop** .

7/3,K/10 (Item 10 from file: 350)
DIALOG(R)File 350:Derwent WPIX

0007168268 - Drawing available
WPI ACC NO: 1995-208113/199528
XRPX Acc No: N1995-163068
Adaptive network for digital transmission system - has adaptive feedback circuit coupled to summation node for input signal via switch allowing resetting of feedback circuit variables
Patent Assignee: SIEMENS AG (SIEI)
Inventor: FERENC L; GAZSI L; LAJOS G; LEEB F; TONCH R
Patent Family (6 patents, 5 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
DE 4434723	C1	19950614	DE 4434723	A	19940928	199528	B
EP 704968	A1	19960403	EP 1995115097	A	19950925	199618	E
JP 8116296	A	19960507	JP 1995269362	A	19950922	199628	E
US 5805639	A	19980908	US 1995535714	A	19950928	199843	E
EP 704968	B1	20000202	EP 1995115097	A	19950925	200011	E
DE 59507728	G	20000309	DE 59507728	A	19950925	200019	E
			EP 1995115097	A	19950925		

Priority Applications (no., kind, date): DE 4434723 A 19940928
Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
DE 4434723	C1	DE	5	2	
EP 704968	A1	DE	5	2	
Regional Designated States,Original: DE FR GB IT					
JP 8116296	A	JA	5		
EP 704968	B1	DE			
Regional Designated States,Original: DE FR GB IT					
DE 59507728	G	DE			Application EP 1995115097 Based on OPI patent EP 704968

Class Codes
...International Classification (Main): **H04B-003/06**

Original Publication Data by Authority

Claims:
...output signal and the input signal of the decision unit and which is supplied to **an adaptive** feedback path (5) with state variables (13, 16) and coefficients (20, 21), whose output is...
...a first signal value occurs whose amplitude exceeds a specific threshold value, actuates, in the **next clock** cycle, a changeover unit (7), which is located in **between the** feedback path (5) and the summation node (2), in such a manner that the summation node has a digital zero signal applied to it and sets the state variables **of the** feedback path (5) to zero as well as freezing the coefficients (20, 21) **of the** feedback path (5).

Circuit adaptatif avec un premier noeud additionneur (2), sur lequel **est amene** un signal d'entree (1) et dont le signal de sortie est conduit a une...upon by a digital zero signal, for setting said status variables of said adaptive feedback **branch** to zero and for freezing said coefficients of said adaptive feedback branch.

7/3,K/11 (Item 11 from file: 350)
DIALOG(R)File 350:Derwent WPIX

0004309172 - Drawing available
WPI ACC NO: 1988-037554/198806

Receive method circuit for FM stereo multiplexed signals - transmitting using RF quadrature mixer and selecting channel by compass filtering mixer outputs
Patent Assignee: DEUT ITT IND GMBH (INTT)
Inventor: GASSMANN G G
Patent Family (5 patents, 6 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
EP 255553	A	19880210	EP 1986110931	A	19860807	198806	B
JP 63046023	A	19880226	JP 1987195403	A	19870806	198814	E
US 4817167	A	19890328	US 198773613	A	19870715	198915	E
EP 255553	B1	19920722	EP 1986110931	A	19860807	199230	E
DE 3686156	G	19920827	DE 3686156	A	19860807	199236	E
			EP 1986110931	A	19860807		

Priority Applications (no., kind, date): EP 1986110931 A 19860807

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
EP 255553	A	DE	9	5	
Regional Designated States,Original: DE FR GB IT NL					
US 4817167	A	EN	8		
EP 255553	B1	DE	10	5	
Regional Designated States,Original: DE FR NL					
DE 3686156	G	DE			Application EP 1986110931
					Based on OPI patent EP 255553

Equivalent Alerting Abstract ...channel signal, the amount of negative feedback being determined by an amplifier in the negative- **feedback path** . If the demodulated stereo multiplex signal is used as the feedback signal, a third low...

Class Codes
International Classification (Main): **H04B-001/16**

Original Publication Data by Authority

Original Abstracts:
...channel signal, the amount of negative feedback being determined by an amplifier in the negative- **feedback path** . If the **demodulated stereo** multiplex signal is used as the feedback signal, a third low-pass filter is necessary...
Claims:
...frequency-modulated stereo multiplex signal, wherein the center frequency of the IF band is approximately **zero** , and wherein **selectivity** is established by low-pass filtering **after** the conversion **to** the IF band, characterized by the following features:</br> - The frequency deviation in the IF band...

7/3,K/12 (Item 12 from file: 350)
DIALOG(R)File 350:Derwent WPIX

0003811744
WPI ACC NO: 1986-265165/198641
Multichannel digital recording system for low amplitude signals - uses amplifier adjacent to sensing electrodes to condition signals prior to digital processing
Patent Assignee: DELIMER SA (DELI-N)
Patent Family (2 patents, 11 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
BE 904825	A	19860915	BE 216706	A	19860527	198641	B

			BE 904825	A	19860527		
EP 247991	A	19871202	EP 1987870074	A	19870522	198748	E

Priority Applications (no., kind, date): BE 216706 A 19860527; BE 904825 A 19860527

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
BE 904825	A	FR	37	8	
EP 247991	A	FR			

Regional Designated States,Original: AT BE CH DE ES FR GB IT LI NL SE

Alerting Abstract ...These transmiters comprises a differential input preamplifier and whose drain circuits are connected to a **zero** level **adjustment** circuit while the source circuit connect to current sources. The preamplifier outputs drive an op...

...The op. amp also drives voltage shift circuits in a **feedback loop** to the current source to optimise the operating point of the FET's, such as the zero temperature coefficient point. By applying double **feedback loop** comprising one **loop** controlled by differential amplitudes signals and a second loop controlling in common mode voltage a...

Class Codes

... (Additional/Secondary): **H04B**

7/3,K/13 (Item 13 from file: 350)

DIALOG(R)File 350:Derwent WPIX

0003787435

WPI ACC NO: 1986-239106/198637

Digital-analogue signal converter - has two feedback loops **to minimise low frequency unwanted output signal**

Patent Assignee: ALCATEL NV (ALCA-N); ITT IND BELGIUM SA (INTT)

Inventor: CANNAERTS J; CANNAERTS J D G L; REUSENS P; REUSENS P P F

Patent Family (7 patents, 16 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
BE 904297	A	19860827	BE 60933	A	19860227	198637	B
			BE 904297	A	19860227		
EP 234666	A	19870902	EP 1987200302	A	19870221	198735	E
AU 198769004	A	19870903				198742	E
JP 62225028	A	19871003	JP 198745097	A	19870227	198745	E
US 4733219	A	19880322	US 198719443	A	19870226	198815	E
EP 234666	B	19920422	EP 1987200302	A	19870221	199217	NCE
DE 3778397	G	19920527	DE 3778397	A	19870221	199223	E
			EP 1987200302	A	19870221		

Priority Applications (no., kind, date): BE 904297 A 19860227; BE 60933 A 19860227; EP 1987200302 A 19870221

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
BE 904297	A	FR	21	7	
EP 234666	A	EN			

Regional Designated States,Original: AT BE CH DE ES FR GB GR IT LI LU NL SE

EP 234666	B	EN	12	

Regional Designated States,Original: CH DE FR GB IT LI

DE 3778397	G	DE	Application EP 1987200302 Based on OPI patent EP 234666

...has two feedback loops **to minimise low frequency unwanted output**

signal

Alerting Abstract ...The output terminal is connected via a **feedback loop** into the first loop at the second subtractor as well as at the first subtractor...

Equivalent Alerting Abstract ...signal is equal to zero the output signal of the first integrator circuit will rapidly **change** to **zero** because the second control **loop** applied an additional **feedback** signal to the third subtractor circuit and therefore also to the first integrator circuit...

...Because the output signal of the first integrator output circuit signal thus more rapidly **varies** to **zero** the same is true for the output signal of the second integrator circuit and therefore...

Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version
... **H04B-0014/06**
... **H04B-0014/02**

Original Publication Data by Authority

Original Abstracts:
...analog signals. This circuit is based on a Sigma-Delta modulator to which an internal **feedback loop** (SD2, SR4) is added. This **feedback loop** allows to obtain an output signal equal to zero even when the input signal which...

...signal is equal to zero the output signal of the first integrator circuit will rapidly **change** to **zero** because the second control **loop** applies an additional **feedback** signal to the third subtractor circuit and therefore also to the first integrator circuit. Because the output signal of the first integrator output circuit signal thus more rapidly **varies** to **zero** the same is true for the output signal of the second integrator circuit and therefore...

7/3,K/14 (Item 14 from file: 350)
DIALOG(R)File 350:Derwent WPIX

0003499539
WPI ACC NO: 1985-276233/198544
Integrating opto-electronic receiver with increased dynamic range - has feedback amplifier whose gain is variable in proportion to luminance to which photodiode is exposed
Patent Assignee: NORDQVIST G O (NORD-I); TELEFONAKTIEBOLAGET ERICSSON L M (TELF)
Inventor: NORDOVIST G O; NORDQVIST G O; SVENSON L G
Patent Family (15 patents, 12 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
WO 1985004773	A	19851024	WO 1985SE133	A	19850326	198544 B
FR 2563066	A	19851018				198548 E
SE 198402056	A	19851013	SE 19842056	A	19840412	198549 E
AU 198542169	A	19851101				198607 E
NO 198504472	A	19860106				198609 E
NL 198520066	A	19860303				198615 E
DE 3590147	T	19860515	DE 3590147	A	19850326	198621 E
FI 198504423	A	19851111				198636 E
JP 61501884	W	19860828	JP 1985501546	A	19850326	198641 E
GB 2173966	A	19861022	GB 198530083	A	19850326	198643 E
DK 198505737	A	19851211				198645 E

US 4642453	A	19870210	US 1985810333	A	19851108	198708	E
GB 2173966	B	19871104	GB 198530083	A	19850326	198744	E
SE 452827	B	19871214	SE 19842056	A	19840412	198801	E
IT 1184400	B	19871028				199041	E

Priority Applications (no., kind, date): SE 19842056 A 19840412

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 1985004773	A	EN	6	2	
National Designated States,Original: AU DE DK FI GB JP NL NO US					
SE 198402056	A	SV			
SE 452827	B	SV			

Class Codes

International Classification (+ Attributes)
IPC + Level Value Position Status Version

... **H04B-0010/04** ...

... **H04B-0010/06** ...
... **H04B-0010/14** ...

... **H04B-0010/158** ...

... **H04B-0010/26** ...

... **H04B-0010/28**
... **H04B-0010/04** ...

... **H04B-0010/06** ...

... **H04B-0010/14** ...

... **H04B-0010/152** ...

... **H04B-0010/26** ...

... **H04B-0010/28**

Original Publication Data by Authority

Claims:

...circuit in which the voltage state in a point (p), which is connected to one **pole** of the converter, **varies** in response to the luminance, and to which point there is connected the input of...

...components, (D,F1) of the receiver being utilized for the integration, characterized in that a **feed - back path** containing a controllable voltage regulation means, e.g. an amplifier or a voltage divider, is...

7/3,K/15 (Item 15 from file: 350)

DIALOG(R)File 350:Derwent WPIX

0002245468
WPI ACC NO: 1981-F6953D/198125
Low noise amplifier circuit - has transistor with grounded emitter configuration and parallel and series feedback loop **circuits**
Patent Assignee: FUJITSU LTD (FUIT)
Inventor: OGAWA T; YAMAGUCHI N
Patent Family (2 patents, 12 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
EP 30125	A	19810610	EP 1980304252	A	19801127	198125 B

US 4370624 A 19830125 US 1980211050 A 19801128 198306 E

Priority Applications (no., kind, date): JP 1979154035 A 19791128

Patent Details
Number Kind Lan Pg Dwg Filing Notes
EP 30125 A EN
Regional Designated States,Original: AT BE CH DE FR GB IT LI LU NL SE

...has transistor with grounded emitter configuration and parallel and series feedback loop **circuits**

Alerting Abstract ...An amplifier circuit includes a transistor (4) in a grounded emitter configuration, with a parallel **feedback loop** (ZF) between the collector and base and a series **feedback loop** (ZE) between the emitter and ground. The parallel **feedback loop** comprises a circuit having a lower impedance at low frequencies and a higher impedance at high frequencies and the series **feedback loop** comprises a circuit having a higher impedance at low frequencies and a lower impedance at...

...is higher at high frequencies and good overload characteristic. A zero point of the parallel **feedback loop** circuit coincides at least approximately with a pole of the series **feedback loop** circuit, and a pole of the parallel **feedback loop** circuit coincides at least approximately with a zero point of the series **feedback loop** circuit.

Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version
... **H04B-0003/36**
... **H04B-0003/36**

Original Publication Data by Authority

Original Abstracts:
...Transistor (4) of the amplifier, which is in a grounded emitter configuration, has a parallel **feedback loop** circuit of impedance (ZF) and a series **feedback loop** circuit of impedance (ZE). The impedance (ZF) is lower at low frequencies and higher at...

...and a series impedance element connected between emitter and ground. The parallel impedance element is **selected** to have a **pole** near a zero of the series impedance element, and the parallel impedance element also has
...
?

8/3,K/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX

0013367034 - Drawing available
WPI ACC NO: 2003-456465/200343
XRPX Acc No: N2003-363001
Feedback loop for use in radio communication devices, has adjustable zero **and** pole **elements provided in forward path of feedback loop for adjusting characteristic bandwidth of loop**
Patent Assignee: GABATO M P (GABA-I); GAILUS P H (GAIL-I); MCCALLUM K J (MCCA-I); WILHITE J B (WILH-I)
Inventor: GABATO M P; GAILUS P H; MCCALLUM K J; WILHITE J B
Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 20030038675	A1	20030227	US 2001933364	A	20010820	200343 B

Priority Applications (no., kind, date): US 2001933364 A 20010820

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20030038675	A1	EN	11	8	

Feedback loop for use in radio communication devices, has adjustable zero **and** pole **elements provided in forward path of feedback loop for adjusting characteristic bandwidth of loop**

Alerting Abstract ...NOVELTY - **Adjustable zero** elements (212,213) and **adjustable pole** elements (220,221) provided in the forward path (202) of the feedback loop, change the...
...USE - Feedback loop e.g. **Cartesian feedback loop** for use in **radio communication devices** such as radio transmitter, amplifiers, oscillators, phase-lock loops, feedback demodulators, etc...

...DESCRIPTION OF DRAWINGS - The figure shows the **Cartesian feedback loop** having adjustable loop **bandwidth** .
...

...212,213 **adjustable zero** elements
...

...220,221 **adjustable pole** elements

Original Publication Data by Authority

Original Abstracts:
A feedback loop with an adjustable closed loop frequency response. The feedback loop contains **adjustable pole** (212, 213) **and adjustable zero** elements (220,221) for **changing the pole** and/or **zero** locations in **the** feedback **loop** 's loop **frequency** response thereby **changing** the closed loop frequency response of the feedback loop. In one embodiment, the feedback loop is a **Cartesian feedback loop** suitable for use in a **radio transmitter.**
Claims:
...variable output, a feedback loop for adjusting the variable output, the feedback loop comprising: at **least** one **adjustable zero** element.
?

10/3,K/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX

0013842309 - Drawing available
WPI ACC NO: 2004-019711/200402
XRPX Acc No: N2004-015100
Linear transmitter used in e.g. radio telephone, has feedback circuit that is operated in open/closed loop mode corresponding to two different operating points of power amplifier
Patent Assignee: MOTOROLA INC (MOTI)
Inventor: BAKER M H; **GAILUS P H** ; TURNEY W J
Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 6606483	B1	20030812	US 2000686732	A	20001010	200402 B

Priority Applications (no., kind, date): US 2000686732 A 20001010

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 6606483	B1	EN	19	7	

...Inventor: **GAILUS P H**
Alerting Abstract ...NOVELTY - An amplifier **feedback loop** (210) has a power amplifier (PA) (222), feedback circuit (224) and switches (211- 214). The...
...210 amplifier **feedback loop**

Class Codes
International Classification (Main): **H04B-001/04**

Original Publication Data by Authority

Inventor name & address:
... **Gailus, Paul H**
Original Abstracts:
A linear transmitter includes an amplifier **feedback loop** for amplifying **an input** signal at a power amplifier. The **feedback loop** is operated **in an** open **loop** mode when the power amplifier is operating at a first operating point and is operated...

...at a second operating point. The transmitter further includes an auxiliary loop coupled to the **amplifier feedback loop** that provides **phase training** for the **feedback loop** and power **leveling when** the **feedback loop** is operating **open loop** . Open **loop** phase training and power leveling is done during open loop transmission, without an associated training...
Claims:
We claim: 1. A linear transmitter comprising: an amplifier **feedback loop** comprising: a power amplifier that receives and **amplifies an** input signal to produce an output signal, wherein the power amplifier comprises an input port...

...feedback circuit to, and decouple the feedback circuit from, the input port of the power **amplifier** ; an auxiliary **loop** coupled to **the** amplifier **feedback loop** that receives the sampled output signal from the **feedback loop** , **compares** the sampled output signal **to a** desired input signal, determines a phase error based **on the** comparison of the sampled output signal to the desired input signal, and aligns a phase...

10/3,K/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX

0010839344 - Drawing available
WPI ACC NO: 2001-457367/200149
XRPX Acc No: N2001-338969
Apparatus for linear amplification of a radio frequency signal using an impedance modulator to reduce output signal error in response to a feedback error signal
Patent Assignee: MOTOROLA INC (MOTI)
Inventor: **GAILUS P H** ; TURNEY W J
Patent Family (5 patents, 23 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 2001047127	A1	20010628	WO 2000US30336	A	20001102	200149	B
EP 1155499	A1	20011121	EP 2000976887	A	20001102	200176	E
			WO 2000US30336	A	20001102		
BR 200008250	A	20020409	BR 20008250	A	20001102	200232	E
			WO 2000US30336	A	20001102		
US 6449465	B1	20020910	US 1999468025	A	19991220	200263	E
CA 2371792	C	20050517	CA 2371792	A	20001102	200534	E
			WO 2000US30336	A	20001102		

Priority Applications (no., kind, date): US 1999468025 A 19991220

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2001047127	A1	EN	49	10	
National Designated States,Original: BR CA					
Regional Designated States,Original: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR					
EP 1155499	A1	EN			PCT Application WO 2000US30336 Based on OPI patent WO 2001047127
Regional Designated States,Original: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR					
BR 200008250	A	PT			PCT Application WO 2000US30336 Based on OPI patent WO 2001047127
CA 2371792	C	EN			PCT Application WO 2000US30336 Based on OPI patent WO 2001047127

Inventor: **GAILUS P H** ...

Class Codes
...International Classification (Main): **H04B-001/04**

Original Publication Data by Authority

Inventor name & address:
GAILUS P H ...

... **GAILUS P H** ...

... **GAILUS, Paul, H** ...

... **Gailus, Paul H** ...

... **GAILUS, Paul, H**
Original Abstracts:
...Intermodulation distortion generated in the feedback circuit (416) by delay mismatches between amplitude and phase **feedback paths** , and non-**linear effects** of AM/PM conversion in a limiter (520), are suppressed by placing limiter (520) and...
...Intermodulation distortion generated in the feedback circuit

(416) by delay mismatches between amplitude and phase **feedback paths** , and non-linear effects of AM/PM conversion in a limiter (520), are suppressed by placing limiter (520) and quadrature downconverter (510) in **a forward path** of the overall amplifier loop...

...Intermodulation distortion generated in the feedback circuit (416) by delay mismatches between amplitude and phase **feedback paths** , and non-linear effects of AM/PM conversion in a limiter (520), are suppressed by placing limiter (520) and quadrature downconverter (510) in **a** forward **path** of the overall amplifier **loop** .

10/3,K/3 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX

0007953117 - Drawing available
WPI ACC NO: 1997-042632/199704
Zero IF transmitter with DC offset reduction - has successive approximation register is operatively coupled to zero-IF transmitter, arranged and constructed external to feedback loop **to successively approximate value to correct DC offset**
Patent Assignee: MOTOROLA INC (MOTI)
Inventor: **GAILUS P H** ; TURNEY W J
Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 5584059	A	19961210	US 199385439	A	19930630	199704 B

Priority Applications (no., kind, date): US 199385439 A 19930630

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 5584059	A	EN	7	4	

...successive approximation register is operatively coupled to zero-IF transmitter, arranged and constructed external to feedback loop **to successively approximate value to correct DC offset**
Inventor: **GAILUS P H** ...

Alerting Abstract ...The appts includes a zero-IF transmitter having a **feedback loop** and having a DC offset, representative of a carrier feedthrough signal. A successive approximation register is operatively coupled to the zero-IF transmitter, arranged and constructed external to the **feedback loop** to successively approximate a value to correct the DC offset. A summator is located within the **feedback loop** of the zero-IF transmitter and operatively coupled to the successive approximation register, for adding...

...register is implemented in a digital signal processor, while successively approximating is performed when the **feedback loop** of the zero-IF transmitter is open, e.g. when the zero-IF transmitter transmits...

Class Codes
International Classification (Main): **H04B-001/04**

Original Publication Data by Authority

Inventor name & address:
... **Gailus, Paul H**
Claims:
What is claimed is:An apparatus comprising:</br>a zero-IF transmitter

having a **feedback loop** and having a DC offset, representative of **a carrier** feedthrough signal;</br>a successive approximation register, operatively coupled to the zero-IF transmitter, arranged and constructed external to the **feedback loop** to successively approximate a value to correct the DC **offset** ; **and** </br>a summer, within the **feedback loop** of the zero-IF transmitter and operatively coupled to the successive **approximation register** , for adding the value to a desired input to reduce the DC offset.

10/3,K/4 (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX

0007886613 - Drawing available
WPI ACC NO: 1996-518265/199651
XRPX Acc No: N1996-436779
Off-channel interference reduction method for linear radio transmitter - using closed loop feedback **including** loop **phase adjusting circuit path to maintain linearity in power amplifier with varying load impedance**
Patent Assignee: MOTOROLA INC (MOTI)
Inventor: BAKER M H; CYGAN L F; **GAILUS P H** ; TURNEY W J
Patent Family (1 patents, 1 countries)

Patent			Application			
Number	Kind	Date	Number	Kind	Date	Update
US 5574992	A	19961112	US 1994235415	A	19940429	199651 B

Priority Applications (no., kind, date): US 1994235415 A 19940429

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 5574992	A	EN	9	6	

...using closed loop feedback **including** loop **phase adjusting circuit path to maintain linearity in power amplifier with varying load impedance**
...Inventor: **GAILUS P H**

Alerting Abstract ...the loop phase adjusting circuit in order to adjust the phase value for the closed **loop feedback path** . Pref. an information signal source provides a training signal within a training interval. During the...

...impedance is measured and input to the parameter source. The loop phase of the closed **feedback path** is then adjusted to reduce off-channel interference outside the training interval...

Class Codes
International Classification (Main): **H04B-001/04**

Original Publication Data by Authority

Inventor name & address:
... **Gailus, Paul H**
Original Abstracts:
A linear transmitter (100), which utilizes closed **loop feedback** to maintain **its linearity** , employs a method for reducing off-channel interference produced by the linear transmitter (100). A...

...The DAPS (126) is then used to adjust at least one loop parameter of the **closed loop feedback** such that **off - channel** interference is reduced.
Claims:
...and a power amplifier having a varying load impedance, the linear transmitter utilizing a closed **loop feedback path** to maintain

linearity, wherein **the closed loop feedback path** includes a **loop** phase **adjusting circuit , a** method for **reducing** off-channel interference comprising the steps of:</br>A) providing a dynamically alterable parameter source;</br>B...

...adjusting circuit; and</br>F) adjusting, by the loop phase adjusting circuit, a phase value for **the** closed **loop feedback path** based, at least in part, on the loop phase adjustment value.

10/3,K/5 (Item 5 from file: 350)
DIALOG(R)File 350:Derwent WPIX

0007633272 - Drawing available
WPI ACC NO: 1996-251976/199625
XRPX Acc No: N1996-211705
Radio transmitter with stable linear response - has reference signal combined with feedback signal to provide error signal to amplifier to control transmitter parameter variables
Patent Assignee: MOTOROLA INC (MOTI)
Inventor: CYGAN L F; CYGEN L F; **GAILUS P H** ; TURNEY W J
Patent Family (9 patents, 20 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 1996014691	A1	19960517	WO 1995US11947	A	19950919	199625	B
US 5564087	A	19961008	US 1994333693	A	19941103	199646	E
EP 806087	A1	19971112	EP 1995933868	A	19950919	199750	E
			WO 1995US11947	A	19950919		
BR 199509139	A	19980721	BR 19959139	A	19950919	199836	E
			WO 1995US11947	A	19950919		
CA 2203168	C	20000815	CA 2203168	A	19950919	200050	E
			WO 1995US11947	A	19950919		
EP 806087	B1	20020724	EP 1995933868	A	19950919	200256	E
			WO 1995US11947	A	19950919		
DE 69527549	E	20020829	DE 69527549	A	19950919	200264	E
			EP 1995933868	A	19950919		
			WO 1995US11947	A	19950919		
CN 1162374	A	19971015	CN 1995196034	A	19950919	200311	E
			WO 1995US11947	A	19950919		
CN 1128505	C	20031119	CN 1995196034	A	19950919	200565	E

Priority Applications (no., kind, date): US 1994333693 A 19941103

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 1996014691	A1	EN	28	9	
National Designated States,Original: BR CA CN VN					
Regional Designated States,Original: AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE					
US 5564087	A	EN	15	9	
EP 806087	A1	EN			PCT Application WO 1995US11947 Based on OPI patent WO 1996014691
Regional Designated States,Original: DE FR GB					
BR 199509139	A	PT			PCT Application WO 1995US11947 Based on OPI patent WO 1996014691
CA 2203168	C	EN			PCT Application WO 1995US11947 Based on OPI patent WO 1996014691
EP 806087	B1	EN			PCT Application WO 1995US11947 Based on OPI patent WO 1996014691
Regional Designated States,Original: DE FR GB					
DE 69527549	E	DE			Application EP 1995933868 PCT Application WO 1995US11947 Based on OPI patent EP 806087 Based on OPI patent WO 1996014691

CN 1162374 A ZH PCT Application WO 1995US11947
Based on OPI patent WO 1996014691

...Inventor: **GAILUS P H**

Alerting Abstract ...a linear transmitter involves providing a transmitter portion having an amplification stage and a negative **feedback** correction **loop** with a **feedback** signal. A reference signals and the feedback signal are combined to produce an error signal...

Class Codes
...International Classification (Main): **H04B-001/04**

Original Publication Data by Authority

Inventor name & address:
... **GAILUS P H** ...

... **GAILUS P H** ...

... **GAILUS P H** ...

... **GAILUS, Paul, Howe, 500 Grego Court, Prospect Heights, IL 60070, US** ...

... **GAILUS, Paul, Howe** ...

... **Gailus, Paul H** ...

... **GAILUS, PAUL, HOWE, US**
Original Abstracts:
...a stable, linear response. The transmitter (200) includes an amplification stage (242), and a negative **feedback** correction **loop** (244) **with** a **feedback** signal (252). A **reference** signal (251) is combined with the feedback signal (252) to produce an error signal (253...

...a stable, linear response. The transmitter (200) includes an amplification stage (242), and a negative **feedback** correction **loop** (244) with a **feedback** signal (252). **A** reference **signal** (251) is combined **with** the feedback signal (252) to produce an error signal (253) for coupling to the amplification...

...a stable, linear response. The transmitter (200) includes an amplification stage (242), and a negative **feedback** correction **loop** (244) with a **feedback** signal (252). A reference signal (251) is **combined** with **the** **feedback** signal (252) **to** produce an error signal (253) for coupling to the amplification stage (242). Transmitter parameters are...
Claims:
...a linear transmitter involves providing a transmitter portion having an amplification stage and a negative **feedback** correction **loop** with a **feedback** signal. A reference signals and the feedback signal are combined to produce an error signal...

...the steps of:providing a transmitter portion having an amplification stage (242) and a negative **feedback** correction **loop** with a **feedback** signal (252);combining a reference signal (251) and the feedback signal (252) to produce an error **signal** (253) **for** coupling to **the** amplification stage (242);and varying transmitter parameters in response to the error signal (253),<b>characterised...

...comprising the steps of:</br>providing a transmitter portion having an amplification stage, and a negative **feedback** correction **loop** with a **feedback** signal;</br>combining a reference signal for amplification and the feedback signal to produce an error...

...varying transmitter parameters when the difference between the reference signal and the error signal exceeds **a** particular **threshold** , including the **step** of generating a training waveform and using the training waveform to adjust gain and phase...

10/3,K/6 (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0007378500 - Drawing available
WPI ACC NO: 1995-265125/199535
XRPX Acc No: N1995-204005
Power amplifier with closed loop feedback **for radio transmitter - performs gain adjustment outside of control loop to maintain constant gain during opening and closing**
Patent Assignee: MOTOROLA INC (MOTI)
Inventor: BASTANI B; **GAILUS P H** ; WRAY A J
Patent Family (12 patents, 13 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
EP 665641	A2	19950802	EP 1994120389	A	19941222	199535	B
GB 2286302	A	19950809	GB 19941704	A	19940129	199535	E
US 5467055	A	19951114	US 1995369243	A	19950106	199551	E
JP 7303016	A	19951114	JP 199530267	A	19950127	199603	E
EP 665641	A3	19960214	EP 1994120389	A	19941222	199622	E
CN 1124423	A	19960612	CN 1995101486	A	19950128	199747	E
EP 665641	B1	19980429	EP 1994120389	A	19941222	199821	E
DE 69409939	E	19980604	DE 69409939	A	19941222	199828	E
			EP 1994120389	A	19941222		
ES 2115147	T3	19980616	EP 1994120389	A	19941222	199830	E
GB 2286302	B	19981216	GB 19941704	A	19940129	199901	E
JP 3223744	B2	20011029	JP 199530267	A	19950127	200171	E
CN 1077745	C	20020109	CN 1995101486	A	19950128	200513	E

Priority Applications (no., kind, date): GB 19941704 A 19940129

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
EP 665641	A2	EN	5	2	
Regional Designated States,Original: AT BE CH DE ES FR IE IT LI NL SE					
GB 2286302	A	EN	10	2	
US 5467055	A	EN	5	2	
JP 7303016	A	JA	5		
EP 665641	A3	EN			
EP 665641	B1	EN	6	2	
Regional Designated States,Original: AT BE CH DE ES FR IE IT LI NL SE					
DE 69409939	E	DE			Application EP 1994120389 Based on OPI patent EP 665641
ES 2115147	T3	ES			Application EP 1994120389 Based on OPI patent EP 665641
JP 3223744	B2	JA	5		Previously issued patent JP 07303016

Power amplifier with closed loop feedback **for radio transmitter...**
...Inventor: **GAILUS P H**

Class Codes
...International Classification (Main): **H04B-001/02** ...

... **H04B-001/04**

Original Publication Data by Authority

Inventor name & address:
... **GAILUS P H** ...

... **Gailus, Paul Howe, 500 Grego Court, Prospect Heights, Illinois 60916, US** ...

... **GAILUS P H** ...

... **Gailus, Paul Howe, 500 Grego Court, Prospect Heights, Illinois 60916, US** ...

... **GAILUS P H** ...
... **GAILUS P H** ...

... **GAILUS PAUL H** ...

... **Gailus, Paul H**
Original Abstracts:
A power amplifier is described, such as an amplifier employing closed **loop feedback** (e.g. **Cartesian feedback**) as well as a radio transmitter incorporating such an amplifier. The amplifier circuit has an...

...A power amplifier is described, such as an amplifier employing closed **loop feedback** (e.g. Cartesian **feedback**) as well as **a radio** transmitter incorporating such an amplifier. The amplifier circuit has an amplifier control loop and a...
Claims:
...19) for subtracting the negative feedback signal from the signal to be amplified, thereby providing **an** amplifier control **loop** and</br> loop closing means (18, 107) for selectively opening and closing the control loop in...

...15, 17) coupled to the output of the forward gain element for providing a negative **feedback** signal,</br> a subtractor element (19) for subtracting the negative feedback signal from the signal to be amplified, thereby providing an amplifier control **loop** and</br> **loop** closing means (18, 107) for selectively opening and closing the control **loop** in response **to** a **loop** closing signal (40); and</br> gain adjustment means (30, 31, 32, 33, 101, 102, 110, 111...an amplifier control loop and loop closing means for selectively opening and closing the control **loop in** response to a **loop** closing signal; and a gain adjustment element external to the **control loop** , responsive to the **loop** closing signal to **select** a first external gain when the loop is opened and a second external gain when...

10/3,K/7 (Item 7 from file: 350)
DIALOG(R)File 350:Derwent WPIX

0007034546 - Drawing available
WPI ACC NO: 1995-052353/199507
XRPX Acc No: N1995-041078
Compensating varying antenna loading of linear RF communications transmitter - determining effects of varying loading on overall loop gain and adjusting gain stage to maintain constant overall loop gain
Patent Assignee: MOTOROLA INC (MOTI)
Inventor: CYGAN L F; **GAILUS P H** ; TURNEY W J
Patent Family (14 patents, 17 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 1995001009	A1	19950105	WO 1994US6268	A	19940603	199507	B
US 5423082	A	19950606	US 199380635	A	19930624	199528	E
EP 710411	A1	19960508	EP 1994921234	A	19940603	199623	E
			WO 1994US6268	A	19940603		
US 5542096	A	19960730	US 199380635	A	19930624	199636	E
			US 1995379417	A	19950127		

CN 1125497	A	19960626	CN 1994192522	A	19940603	199748	E
CA 2323915	A1	19950105	CA 2161901	A	19940603	200112	E
			CA 2323915	A	19940603		
CA 2161901	C	20010220	CA 2161901	A	19940603	200113	E
			WO 1994US6268	A	19940603		
EP 1239597	A1	20020911	EP 1994921234	A	19940603	200267	E
			EP 20028491	A	19940603		
EP 710411	B1	20021009	EP 1994921234	A	19940603	200274	E
			WO 1994US6268	A	19940603		
			EP 20028491	A	19940603		
DE 69431522	E	20021114	DE 69431522	A	19940603	200282	E
			EP 1994921234	A	19940603		
			WO 1994US6268	A	19940603		
CN 1046385	C	19991110	CN 1994192522	A	19940603	200461	E
EP 1239597	B1	20050420	EP 1994921234	A	19940603	200528	E
			EP 20028491	A	19940603		
DE 69434350	E	20050525	DE 69434350	A	19940603	200538	E
			EP 20028491	A	19940603		
DE 69434350	T2	20050922	DE 69434350	A	19940603	200562	E
			EP 20028491	A	19940603		

Priority Applications (no., kind, date): US 1995379417 A 19950127; US 199380635 A 19930624

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 1995001009	A1	EN	27	2	
National Designated States,Original: CA CN					
Regional Designated States,Original: AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE					
US 5423082	A	EN	9	2	
EP 710411	A1	EN	27	2	PCT Application WO 1994US6268 Based on OPI patent WO 1995001009
Regional Designated States,Original: AT BE CH DE FR GB IT LI NL SE					
US 5542096	A	EN	9	2	Continuation of application US 199380635 Continuation of patent US 5423082
CA 2323915	A1	EN			Division of application CA 2161901
CA 2161901	C	EN			PCT Application WO 1994US6268 Based on OPI patent WO 1995001009
EP 1239597	A1	EN			Division of application EP 1994921234 Division of patent EP 710411
Regional Designated States,Original: AT BE CH DE FR GB IT LI NL SE					
EP 710411	B1	EN			PCT Application WO 1994US6268 Related to application EP 20028491 Related to patent EP 1239597 Based on OPI patent WO 1995001009
Regional Designated States,Original: AT BE CH DE FR GB IT LI NL SE					
DE 69431522	E	DE			Application EP 1994921234 PCT Application WO 1994US6268 Based on OPI patent EP 710411 Based on OPI patent WO 1995001009
EP 1239597	B1	EN			Division of application EP 1994921234 Division of patent EP 710411
Regional Designated States,Original: AT BE CH DE FR GB IT LI NL SE					
DE 69434350	E	DE			Application EP 20028491 Based on OPI patent EP 1239597
DE 69434350	T2	DE			Application EP 20028491 Based on OPI patent EP 1239597

...Inventor: **GAILUS P H**

Equivalent Alerting Abstract ...The transmitter includes closed **loop feedback** , at least one linear amplifying element, an antenna, and at least one gain stage. The closed **loop feedback** maintains linear operation of the amplifying element(s). The method involves determining, by the transmitter...

Class Codes
International Classification (Main): **H04B-001/04** ...

... **H04B-017/00** ...

... **H04B-007/005**

Original Publication Data by Authority

Inventor name & address:
... **GAILUS P H** ...

... **GAILUS P H** ...

... **GAILUS P H** ...

... **GAILUS P H** ...

... **Gailus, Paul Howe** ...
... **Gailus, Paul Howe** ...

... **GAILUS, Paul, Howe, 500 Grego Court, Prospect Heights, IL 60070, US** ...

... **GAILUS, Paul, Howe** ...

... **Gailus, Paul H** ...

... **Gailus, Paul H** ...

... **GAILUS, PAUL, HOWE, US**
Original Abstracts:
A transmitter that includes an amplifying element, an antenna, a gain stage, and a closed **loop feedback** may compensate **for varying** antenna loads without an isolator. This may be accomplished by determining the effects of the...

...an amplifying element (107), an antenna (109), a gain stage (104, 105), and a closed **loop feedback** may compensate for varying antenna loads without **an isolator** . This may be accomplished by determining the effects of the varying loading on overall loop...
...A transmitter that includes an amplifying element, an antenna, a gain stage, and a closed **loop feedback** may compensate for varying antenna loads without an isolator. This may be **accomplished by** determining the effects of the varying loading on overall loop gain. Knowing the effects, the...

...A transmitter that includes an amplifying element, an antenna, a gain stage, and a closed **loop feedback** may compensate for varying antenna loads without an isolator. This may be accomplished by determining the effects **of the** varying loading on overall loop gain. Knowing the effects, the transmitter adjusts the gain of...

...an amplifying element (107), an antenna (109), a gain stage (104, 105), and a closed **loop feedback** may compensate for varying antenna loads without an isolator. This may be accomplished by determining the effects of the varying loading on **overall loop** gain. Knowing the effects, the transmitter adjusts the gain of the gain stage to maintain...
Claims:

...to compensate for varying loading without utilization of an isolator, wherein the transmitter includes closed **loop feedback , at least** one linear amplifying element, an antenna, a signal source, and at least one gain stage, wherein the closed **loop feedback substantially maintains** linear operation of the at least one amplifying element, wherein the signal source provides signals...

...transmitter to compensate for varying loading without utilization of an isolator, wherein the transmitter includes **closed loop** feedback, at least one linear amplifying element (107), an antenna (109), a signal source (101), and at least one gain stage (104), wherein the **closed loop** feedback substantially maintains linear operation of the at least one amplifying element, wherein the signal source provides signals to the at least one linear **amplifying element** for amplification, and wherein the varying loading substantially occurs as a result of reflected energy ... 100) to compensate for varying loading without utilization of an isolator, wherein the transmitter includes **closed loop** feedback (111), at least one linear amplifying element (107), an antenna (109), and at least one gain stage (104, 105), wherein the **closed loop** feedback substantially maintains linear operation of the at least one amplifying element, the method comprises...
...transmitter, effects of the varying loading on overall loop gain of the transmitter to determine **overall loop gain** changes; andadjusting (205), by the transmitter, gain of the at least one gain stage based on the overall loop gain changes **to substantially** maintain the **overall** loop gain at a predetermined gain level...

...transmitter to compensate for varying loading without utilization of an isolator, wherein the transmitter includes **closed loop** feedback, at least one linear amplifying element, an antenna, and at least one gain stage, wherein the **closed loop** feedback substantially maintains linear operation of the at least one amplifying element, the method comprises...

...of the at least one gain stage based on the overall loop gain changes to **substantially maintain** the **overall** loop gain at a predetermined gain level.

...

...method for a transmitter to compensate for varying loading without utilization of an isolator, wherein **the** transmitter includes **closed loop** feedback, at least **one** linear amplifying element, an antenna, a signal source, and at least one gain stage, wherein the **closed loop** feedback substantially maintains linear operation of the at least one amplifying element, wherein the signal...

...by the transmitter, a vector representation of the reflected energy, the vector representation including a **magnitude portion** and a phase portion; and</br>b) adjusting, by the transmitter, signal source level of the signals provided by the signal **source to** the at least one amplifying element based on the vector representation of the reflected energy.

10/3,K/8 (Item 8 from file: 350)

0006475572 - Drawing available
WPI ACC NO: 1993-280983/199335
XRPX Acc No: N1993-215872
Amplifier level setting method - applying training signal to amplifier input and measuring output distortion as training signal is increased, saving training level for accepted distortion limit and adjusting input signal

Patent Assignee: MOTOROLA INC (MOTI)
Inventor: **GAILUS P H** ; TURNEY W J; YESTER F R
Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 5239693	A	19930824	US 1990606679	A	19901031	199335 B

Priority Applications (no., kind, date): US 1990606679 A 19901031

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 5239693	A	EN	7	5	

Inventor: **GAILUS P H** ...

Alerting Abstract ...In an amplifier having linear and nonlinear regions of operation, a negative **feedback path** connects the amplifier output to a first input of a summing device, of which the...

Class Codes
International Classification (+ Attributes)
IPC + Level Value Position Status Version
... **H04B-0001/04**
... **H04B-0001/04**

Original Publication Data by Authority

Inventor name & address:
Gailus, Paul H ...
Claims:
...output, a linear region of operation, and a non-linear region of operation, a negative **feedback path** connecting the amplifier output to a first input of a summing device, the output of...

10/3,K/9 (Item 9 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0005952106 - Drawing available
WPI ACC NO: 1992-183931/199222
XRPX Acc No: N1992-138776
Fast phase shift compensator for linear transmitter - using test signal with known in-phase and quadrature component to obtain feedback signal used to adjust phase shift
Patent Assignee: MOTOROLA CO LTD (MOTI); MOTOROLA INC (MOTI)
Inventor: **GAILUS P** ; **GAILUS P H**
Patent Family (13 patents, 18 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
WO 1992008291	A1	19920514	WO 1991US6789	A	19910920	199222 B
US 5134718	A	19920728	US 1990607423	A	19901031	199233 E
EP 506908	A1	19921007	EP 1991918022	A	19910920	199241 E
			WO 1991US6789	A	19910920	
CN 1061310	A	19920520	CN 1991109621	A	19911010	199305 E
JP 5500596	W	19930204	JP 1991517088	A	19910920	199310 E
			WO 1991US6789	A	19910920	
AU 199216078	A	19930218	AU 199216078	A	19920507	199314 E
TW 215135	A	19931021	TW 1991107136	A	19910910	199402 E
AU 644961	B	19931223	AU 199216078	A	19920507	199407 E
EP 506908	A4	19941012	WO 1991EP1954	A	19911015	199534 E
CA 2068425	C	19951128	CA 2068425	A	19910920	199608 E
KR 199513611	B1	19951113	WO 1991US6789	A	19910920	199902 E
			KR 1992701556	A	19920630	

EP 506908	B1	20000531	EP 1991918022	A	19910920	200031	E
			WO 1991US6789	A	19910920		
DE 69132241	E	20000706	DE 69132241	A	19910920	200039	E
			EP 1991918022	A	19910920		
			WO 1991US6789	A	19910920		

Priority Applications (no., kind, date): US 1990607423 A 19901031

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 1992008291	A1	EN	36	10	
National Designated States,Original: AT CA JP KR					
Regional Designated States,Original: AT BE CH DE DK ES FR GB GR IT LU NL SE					
US 5134718	A	EN	0	10	
EP 506908	A1	EN	36		PCT Application WO 1991US6789
					Based on OPI patent WO 1992008291
Regional Designated States,Original: DE FR GB					
JP 5500596	W	JA			PCT Application WO 1991US6789
					Based on OPI patent WO 1992008291
TW 215135	A	ZH			
AU 644961	B	EN			Previously issued patent AU 9216078
EP 506908	A4	EN			
CA 2068425	C	EN			
KR 199513611	B1	KO			PCT Application WO 1991US6789
EP 506908	B1	EN			PCT Application WO 1991US6789
					Based on OPI patent WO 1992008291
Regional Designated States,Original: DE FR GB					
DE 69132241	E	DE			Application EP 1991918022
					PCT Application WO 1991US6789
					Based on OPI patent EP 506908
					Based on OPI patent WO 1992008291

Inventor: **GAILUS P** ...

... **GAILUS P H**

Alerting Abstract ...inphase and quadrature components is first provided, via an open loop signal path, to modulation **paths** to obtain a **feedback** signal vector and a carrier feedback vector. The two feedback vectors are summed to produce...

Equivalent Alerting Abstract ...linear transmitter has inphase and quadrature modulation paths for an input signal and an open **feedback** signal **path** is provided. The method corrects on initial phase relationship between an input signal having an...

...USE/ADVANTAGE - Provides more time-efficient phase correction to **feedback** signal **path** . Time required for implementing correction is less than 40 milliseconds.

Class Codes

...International Classification (Main): **H04B-001/04**
International Classification (+ Attributes)
IPC + Level Value Position Status Version
... **H04B-0001/04** ...

... **H04B-0001/04**
... **H04B-0001/04** ...

... **H04B-0001/04**

Original Publication Data by Authority

Inventor name & address:
GAILUS P H ...

... **GAILUS P H ...**

... **GAILUS P H ...**

... **GAILUS P H ...**

... **GAILUS P ...**

... **GAILUS P H ...**

... **GAILUS, Paul, Howe ...**

... **Gailus, Paul H ...**

... **GAILUS, PAUL, HOWE, US**
Original Abstracts:
...has inphase and quadrature modulation paths for an input signal and at least one open **feed back** signal **path** is provided, substantially correcting an initial phase relationship between an input signal having an input...

...magnitude. The present invention provides a more time-efficient phase correction to at least one **feedback** signal **path** .

...

...has inphase and quadrature modulation paths for an input signal and at least one open **feedback** signal **path** is provided, substantially correcting an initial phase relationship between an input signal having an input...

...magnitude. The present invention provides a more time-efficient phase correction to at least one **feedback** signal **path** .

...

...has inphase and quadrature modulation paths for an input signal and at least one open **feed back** signal **path** is provided, substantially correcting an initial phase relationship between an input signal having an input...

...magnitude. The present invention provides a more time-efficient phase correction to at least one **feedback** signal **path.** >
Claims:
...inphase and quadrature components is first provided, via an open loop signal bath, to modulation **paths** to obtain a **feedback** signal vector and a carrier feedback vector. The two feedback vectors are summed to produce
...

...In a linear negative feedback transmitter having an open **loop feedback** signal **path** , a method of adjusting an initial phase relationship between an input signal and a feedback...

...maintain negative feedback, the method characterised by the steps of:providing (102), on the open **loop feedback** signal **path** , a test signal independent of the input signal to obtain a resultant feedback signal;comparing...

...time required for implementing the method is less than 40 milliseconds;and closing the open **loop feedback** signal **path** subsequent to adjusting the initial phase relationship between the input

signal and the feedback signal...

10/3,K/10 (Item 10 from file: 350)
DIALOG(R)File 350:Derwent WPIX

0005777679 - Drawing available
WPI ACC NO: 1991-361577/199149
XRPX Acc No: N1991-277029
Linear transmitter training method - having both open and closed loop training mode capability functions to schedule and facilitate training modes
Patent Assignee: MOTOROLA INC (MOTI)
Inventor: **GAILUS P H** ; TURNEY W J; YESTER F R
Patent Family (15 patents, 17 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
US 5066923	A	19911119	US 1990606653	A	19901031	199149	B
WO 1992008280	A1	19920514	WO 1991US7086	A	19910930	199222	E
AU 199189033	A	19920526	AU 199189033	A	19910930	199235	E
			WO 1991US7086	A	19910930		
EP 507926	A1	19921014	EP 1991920047	A	19910930	199242	E
			WO 1991US7086	A	19910930		
CN 1061123	A	19920513	CN 1991108378	A	19911031	199304	E
AU 636807	B	19930506	AU 199189033	A	19910930	199325	E
AU 199335255	A	19930513	JP 1991180123	A	19910625	199326	E
			AU 199335255	A	19930317		
JP 5504454	W	19930708	JP 1991518349	A	19910930	199332	E
			WO 1991US7086	A	19910930		
AU 642610	B	19931021	AU 199189033	A	19910930	199349	E
			AU 199335255	A	19930317		
EP 507926	A4	19930512	EP 1991305772	A	19910626	199526	E
CA 2069513	C	19951212	CA 2069513	A	19910930	199611	E
EP 507926	B1	19970730	EP 1991920047	A	19910930	199735	E
			WO 1991US7086	A	19910930		
DE 69127069	E	19970904	DE 69127069	A	19910930	199741	E
			EP 1991920047	A	19910930		
			WO 1991US7086	A	19910930		
ES 2104732	T3	19971016	EP 1991920047	A	19910930	199748	E
KR 199605373	B1	19960424	WO 1991US7086	A	19910930	199915	E
			KR 1992701557	A	19920630		

Priority Applications (no., kind, date): US 1990606653 A 19901031

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 1992008280	A1	EN	21		
National Designated States,Original: AU CA JP KR					
Regional Designated States,Original: AT BE CH DE DK ES FR GB GR IT LU NL SE					
AU 199189033	A	EN			PCT Application WO 1991US7086
					Based on OPI patent WO 1992008280
EP 507926	A1	EN	21	6	PCT Application WO 1991US7086
					Based on OPI patent WO 1992008280
Regional Designated States,Original: AT DE ES FR GB IT SE					
AU 636807	B	EN			Previously issued patent AU 9189033
					Based on OPI patent WO 1992008280
AU 199335255	A	EN			Division of application JP 1991180123
JP 5504454	W	JA			PCT Application WO 1991US7086
					Based on OPI patent WO 1992008280
AU 642610	B	EN			Division of application AU 199189033

Previously issued patent AU 9335255

EP 507926	A4	EN			
CA 2069513	C	EN			
EP 507926	B1	EN	11	6	PCT Application WO 1991US7086 Based on OPI patent WO 1992008280
Regional Designated States,Original: AT DE ES FR GB IT SE					
DE 69127069	E	DE			Application EP 1991920047 PCT Application WO 1991US7086 Based on OPI patent EP 507926 Based on OPI patent WO 1992008280
ES 2104732	T3	ES			Application EP 1991920047 Based on OPI patent EP 507926
KR 199605373	B1	KO			PCT Application WO 1991US7086

Inventor: **GAILUS P H** ...

Class Codes
...International Classification (Main): **H04B-001/04**

Original Publication Data by Authority

Inventor name & address:
GAILUS P H ...

... **GAILUS P H** ...

... **GAILUS P H** ...

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... **GAILUS P H** ...

... **GAILUS P H** ...

... **GAILUS P H** ...
... **GAILUS, Paul, H., 500 Grego Court, Prospect Heights, IL 60070, US** ...

... **GAILUS P H** ...

... **GAILUS, Paul, H., 500 Grego Court, Prospect Heights, IL 60070, US** ...

... **Gailus, Paul H** ...

... **GAILUS, PAUL, H., US**

Original Abstracts:
...and second information paths (11 and 12), a combined information signal path (13), first and **second feedback paths** (14 and **15**) **and** a phase adjustment unit (16...

...second information paths (11 and 12), a combined information signal path (13), first and second **feedback paths** (14 and 15) and a phase adjustment unit (16).

Claims:
...wherein the negative feedback amplifier comprises at least one input port, at least one output **port** and a **feedback path** connecting the at least one output port to the at **least one** input port thereby forming a loop, the method comprising the steps of: A) during training modes of operation: i) at least occasionally phase adjusting a feedback signal in the **feedback path** to provide a phase adjustment setting; and ii) at least occasionally determining **a clip** level for the amplifier; B) during non-training modes of operation: i) using the phase adjustment setting in adjusting phase around the **loop** , thereby ensuring negative **feedback** operation; and ii) operating the amplifier at a

```
File   2:INSPEC 1898-2007/Jun W2
         (c) 2007 Institution of Electrical Engineers
File   6:NTIS 1964-2007/Jun W4
         (c) 2007 NTIS, Intl Cpyrght All Rights Res
File   8:Ei Compendex(R) 1884-2007/Jun W2
         (c) 2007 Elsevier Eng.  Info. Inc.
File  34:SciSearch(R) Cited Ref Sci 1990-2007/Jun W4
         (c) 2007 The Thomson Corp
File  35:Dissertation Abs Online 1861-2007/May
         (c) 2007 ProQuest Info&Learning
File  56:Computer and Information Systems Abstracts 1966-2007/Jun
         (c) 2007 CSA.
File  57:Electronics & Communications Abstracts 1966-2007/Jun
         (c) 2007 CSA.
File  65:Inside Conferences 1993-2007/Jun 19
         (c) 2007 BLDSC all rts. reserv.
File  95:TEME-Technology & Management 1989-2007/Jun W3
         (c) 2007 FIZ TECHNIK
File  99:Wilson Appl. Sci & Tech Abs 1983-2007/May
         (c) 2007 The HW Wilson Co.
File 144:Pascal 1973-2007/Jun W2
         (c) 2007 INIST/CNRS
File 239:Mathsci 1940-2007/Jul
         (c) 2007 American Mathematical Society
File 256:TecInfoSource 82-2007/Nov
         (c) 2007 Info.Sources Inc
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 2006 The Thomson Corp
File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13
         (c) 2002 The Gale Group
File 603:Newspaper Abstracts 1984-1988
         (c)2001 ProQuest Info&Learning
File 483:Newspaper Abs Daily 1986-2007/Jun 20
         (c) 2007 ProQuest Info&Learning
File 248:PIRA 1975-2007/May W4
         (c) 2007 Pira International

Set      Items   Description
S1       49008   (FEEDBACK OR FEED()BACK)(3N)(LOOP?? OR PATH OR PATHS)
S2          41   CARTESIAN()(FEEDBACK OR FEED()BACK)()LOOP??
S3     1169048   ZERO?? OR POLE??
S4       22420   S3(3N)(ADJUST? OR ALTER? OR MODIF? OR CHANG?  OR SELECT? OR
                  PICK OR PICKS OR PICKING OR MOVE OR MOVES OR MOVING OR VARY?-
                  ?? OR VARIES)
S5         148   AU=(GAILUS, P? OR GAILUS P? OR GABATO, M? OR GABATO M? OR -
                  MCCALLUM, K? OR MCCALLUM K? OR WILHITE, J? OR WILHITE J? OR P-
                  AUL(2N)GAILUS OR MANUEL(2N)GABATO OR KEVIN(2N)MCCALLUM OR JEF-
                  FREY(2N)WILHITE)
S6         102   S1 AND S4
S7          91   S6 NOT PY>2001
S8          60   RD  (unique items)
S9           1   S8 AND TRANSMITTER?
S10          0   S2 AND S4
S11         22   CARTESIAN? AND S4
S12         22   S11 NOT S8
S13         18   S12 NOT PY>2001
S14         12   RD  (unique items)
S15          2   S5 AND CARTESIAN?
S16          2   RD  (unique items)
?
```

8/3,K/1 (Item 1 from file: 2)
DIALOG(R)File 2:INSPEC

08220294 INSPEC Abstract Number: B2002-04-1290-003
Title: Conception of improving precision of low-voltage CMOS sample and hold circuit
Author(s): Wojtyna, R.; Grad, P.; Kalista, M.
Author Affiliation: Univ. of Technol. & Agric. in Bydgoszcz, Poland
Conference Title: Proceedings of the 6th International Conference Mixed Design of Integrated Circuits and Systems. MIXDES'99 p.173-6
Publisher: Tech. Univ. Poland, Lodz, Poland
Publication Date: 1999 Country of Publication: Poland 545 pp.
ISBN: 83 87202 37 1 Material Identity Number: XX-2002-00126
Conference Title: Proceedings of the 6th International Conference Mixed Design of Integrated Circuits and Systems. MIXDES'99
Conference Sponsor: Polish State Committee for Sci. Res.; Poland Sect. IEEE - CAS Chapter; Sci. Support Found
Conference Date: 17-19 June 1999 Conference Location: Krakow, Poland
Language: English
Subfile: B

...Abstract: S/H precision. We propose to increase the sampling precision by switching "on" a negative **feedback loop** for the hold mode operation and switching it "off" for the sample mode one. A...

... role in this conception is played by a current-mode amplifier, whose gain can be **changed** between **zero** and a very high negative value. The sensitivity of the voltage across the holding capacitor...

... are presented. First an idealized macro model is discussed indicating the advantages of applying a **feedback loop** to the variable-gain current amplifier. Then, a model based on a concrete CMOS low...
...Identifiers: negative **feedback loop** ;

8/3,K/2 (Item 2 from file: 2)
DIALOG(R)File 2:INSPEC

07788756 INSPEC Abstract Number: B2001-01-1265H-040, C2001-01-5180-025
Title: A 71 Msample/sec fifth order sigma-delta digital modulator
Author(s): Yonghong Gao; Hannu Tenhunen
Author Affiliation: ESDLab, R. Inst. of Technol., Stockholm, Sweden
Conference Title: 42nd Midwest Symposium on Circuits and Systems (Cat. No.99CH36356) Part vol. 1 p.456-9 vol. 1
Editor(s): Ramirez-Angulo, J.
Publisher: IEEE, Piscataway, NJ, USA
Publication Date: 2000 Country of Publication: USA 2 vol. (xl+1150) pp.
ISBN: 0 7803 5491 5 Material Identity Number: XX-2000-01816
U.S. Copyright Clearance Center Code: 0 7803 5491 5/99/$10.00
Conference Title: 42nd Midwest Symposium on Circuits and Systems
Conference Date: 8-11 Aug. 1999 Conference Location: Las Cruces, NM, USA
Language: English
Subfile: B C

...Abstract: the structure of the modulator is carefully selected in order to reduce the latency in **feedback loops** . Carry-save adders are also utilized to facilitate high speed operation. Based on the analysis and simulation results, simple feedback coefficients for **adjusting** the NTF **zero** positions are employed and the internal word-length is scaled down

without significant degradation of...
...Identifiers: **feedback loops** ;

8/3,K/3 (Item 3 from file: 2)
DIALOG(R)File 2:INSPEC
(c) 2007 Institution of Electrical Engineers. All rts. reserv.

07581554 INSPEC Abstract Number: B2000-06-2860A-008, C2000-06-3260N-004
Title: Coupling of piezopolymer modal sensors and piezoceramic uniform actuators for vibration control
Author(s): Shih, H.C.; Lu, C.Y.; Hsiao, W.H.; Lin, C.T.; Lee, C.K.
Author Affiliation: Inst. of Appl. Mech., Nat. Taiwan Univ., Taipei, Taiwan
Conference Title: Eigth International Conference on Adaptive Structures and Technologies p.204-14
Editor(s): Murotsu, Y.; Rogers, C.A.; Santini,P.; Okubo, H.
Publisher: Technomic, Lancaster, PA, USA
Publication Date: 1998 Country of Publication: USA ix+445 pp.
ISBN: 1 56676 656 7 Material Identity Number: XX-1998-00985
Conference Title: Proceedings Eighth International Conference on Adaptive Structures Technology
Conference Sponsor: Commemorative Assoc. for the Japan World Exposition
Conference Date: 29-31 Oct. 1997 Conference Location: Wakayama, Japan
Language: English
Subfile: B C

...Abstract: study, a PVF/sub 2/ modal sensor and uniform PZT actuator were integrated in a **feedback** control **loop** to control the vibration of a one-dimensional cantilever plate. The advantages of combining a...
...Identifiers: **feedback** control **loop** ; ...

... **pole - zero alternating** theorem

8/3,K/4 (Item 4 from file: 2)
DIALOG(R)File 2:INSPEC
(c) 2007 Institution of Electrical Engineers. All rts. reserv.

06750885 INSPEC Abstract Number: C9712-3390M-072
Title: End-point control of a flexible-link manipulator: theory and experiments
Author(s): Geniele, H.; Patel, R.V.; Khorasani, K.
Author Affiliation: Dept. of Electr. & Comput. Eng., Concordia Univ., Montreal, Que., Canada
Journal: IEEE Transactions on Control Systems Technology vol.5, no.6 p.556-70
Publisher: IEEE,
Publication Date: Nov. 1997 Country of Publication: USA
CODEN: IETTE2 ISSN: 1063-6536
SICI: 1063-6536(199711)5:6L.556:PCFL;1-6
Material Identity Number: P983-97006
U.S. Copyright Clearance Center Code: 1063-6536/97/$10.00
Language: English
Subfile: C

...Abstract: s transmission zeros at desired locations in the complex plane, and a feedback term to **move** the system's **poles** to appropriate positions in the left-half plane. The second part is a **feedback** servo **loop** that allows tracking of the desired trajectory. The controller is implemented on an experimental test...
...Identifiers: **feedback** servo **loop** ;

8/3,K/5 (Item 5 from file: 2)
DIALOG(R)File 2:INSPEC

06316711 INSPEC Abstract Number: C9608-1340D-038
Title: Eigenvalue assignment and exponential stability in sampled-data systems
Author(s): Tokarzewski, J.
Author Affiliation: Inst. of Mech. Vehicles, Mil. Univ. of Technol., Warsaw, Poland
Conference Title: Proceedings of the Third European Control Conference. ECC 95 Part vol.4 p.3370-5 vol.4
Editor(s): Isidori, A.; Bittanti, S.; Mosca, E.; De Luca, A.; Di Benedetto, M.D.; Oriolo, G.
Publisher: Eur. Union Control Assoc, Rome, Italy
Publication Date: 1995 Country of Publication: Italy 4 vol. li+3942 pp.
Material Identity Number: XX96-00798
Conference Title: Proceedings of 1995 European Control Conference
Conference Date: 5-8 Sept. 1995 Conference Location: Rome, Italy
Language: English
Subfile: C

...Abstract: system using a continuous reduced-dimensional state estimator and constant gain feedback (in a double **feedback loop** configuration) from the estimated state is discussed. The proposed design procedure gives freedom in the simultaneous **selection** of **poles** of the closed-loop discrete-time system and of the sampling frequency. Moreover, the procedure...
...Identifiers: double **feedback loop** configuration...

8/3,K/6 (Item 6 from file: 2)
DIALOG(R)File 2:INSPEC

06186597 INSPEC Abstract Number: B9603-8360-063, C9603-3340H-121
Title: A voltage control strategy for current-regulated PWM inverters
Author(s): Wasynczuk, O.; Sudhoff, S.D.; Tran, T.D.; Clayton, D.H.; Hegner, H.J.
Author Affiliation: Dept. of Electr. Eng., Purdue Univ., West Lafayette, IN, USA
Journal: IEEE Transactions on Power Electronics vol.11, no.1 p.7-15
Publisher: IEEE,
Publication Date: Jan. 1996 Country of Publication: USA
ISSN: 0885-8993
SICI: 0885-8993(199601)11:1L.7:VCSC;1-1
Material Identity Number: J608-96001
U.S. Copyright Clearance Center Code: 0885-8993/96/$05.00
Language: English
Subfile: B C

...Abstract: error and an undesirable overshoot of the output voltages during startup. The addition of a **feedback loop** eliminates the steady-state error and reduces the overshoot; however, the natural response is underdamped...
... state error and place the closed-loop poles wherever desired. Moreover, if the closed-loop **poles** are **selected** appropriately, it is possible to eliminate the overshoot of the output voltages during startup transients.

8/3,K/7 (Item 7 from file: 2)

DIALOG(R)File 2:INSPEC

06160466 INSPEC Abstract Number: C9602-1340D-013
Title: Eigenvalue assignment and exponential stability in discrete-time systems
Author(s): Tokarzewski, J.
Author Affiliation: Inst. of Mech. Vehicles, Mil. Tech. Acad., Warsaw, Poland
Journal: Archives of Control Sciences vol.4(40), no.1-2 p.75-88
Publisher: Warsaw Univ. Technol,
Publication Date: 1995 Country of Publication: Poland
CODEN: ACOCES ISSN: 0004-072X
SICI: 0004-072X(1995)4(40):1/2L.75:EAES;1-8
Material Identity Number: P843-95002
Language: English
Subfile: C

...Abstract: system using a continuous reduced-dimensional state estimator and constant gain feedback (in a double **feedback loop** configuration) from the estimated state is discussed. The proposed design procedure gives freedom in the simultaneous **selection** of **poles** of the closed-loop discrete-time system and of the sampling frequency. Moreover, the procedure...

8/3,K/8 (Item 8 from file: 2)
DIALOG(R)File 2:INSPEC

06124806 INSPEC Abstract Number: B9601-6140-078, C9601-1260-060
Title: Dynamic tracking filters for decomposing nonstationary sinusoidal signals
Author(s): Rao, A.; Kumaresan, R.
Author Affiliation: Dept. of Electr. Eng., Rhode Island Univ., Kingston, RI, USA
Conference Title: 1995 International Conference on Acoustics, Speech, and Signal Processing. Conference Proceedings (Cat. No.95CH35732) Part vol.2 p.917-20 vol.2
Publisher: IEEE, New York, NY, USA
Publication Date: 1995 Country of Publication: USA 5 vol. 3662 pp.
ISBN: 0 7803 2431 5
U.S. Copyright Clearance Center Code: 0 7803 2431 5/94/$4.00
Conference Title: 1995 International Conference on Acoustics, Speech, and Signal Processing
Conference Sponsor: Signal Process. Soc. IEEE
Conference Date: 9-12 May 1995 Conference Location: Detroit, MI, USA
Language: English
Subfile: B C

...Abstract: cascade with a dynamic tracking filter (DTF) is assigned to each component. While the adaptively **varying zeros** of the AZF suppresses all interfering neighbors, the DTF captures the slowly varying instantaneous frequency...

... overly restricted by the number of components. We also show that by using two simple **feedback loops** (a **loop** -filter is thus avoided) the tracking information is ensured to be in phase. Finally, the...
...Identifiers: **feedback loops** ;

8/3,K/9 (Item 9 from file: 2)
DIALOG(R)File 2:INSPEC

06086033 INSPEC Abstract Number: C9512-3390M-058
Title: Control of a flexible-link manipulator
Author(s): Geniele, H.; Patel, R.V.; Khorasani, K.
Author Affiliation: Dept. of Electr. & Comput. Eng., Concordia Univ., Montreal, Que., Canada
Conference Title: Proceedings of 1995 IEEE International Conference on Robotics and Automation (Cat. No.95CH3461-1) Part vol.1 p.1217-22 vol.1
Publisher: IEEE, New York, NY, USA
Publication Date: 1995 Country of Publication: USA 3 vol. (xxxxviii+xxxvi+3166) pp.
ISBN: 0 7803 1965 6
U.S. Copyright Clearance Center Code: 0 7803 1965 6/95/$4.00
Conference Title: Proceedings of 1995 IEEE International Conference on Robotics and Automation
Conference Sponsor: Sci. Council of Japan; Robotics Soc. Japan; Soc. Instrum. & Control Eng.; Japan Soc. Mech. Eng.; IEEE Robotics & Autom. Soc
Conference Date: 21-27 May 1995 Conference Location: Nagoya, Japan
Language: English
Subfile: C

...Abstract: s transmission zeros at desired locations in the complex plane, and a feedback term to **move** the system's **poles** to appropriate positions in the left-half plane. The second part is a **feedback** servo **loop** that allows tracking of the desired trajectory. The controller is implemented on an experimental test...
...Identifiers: **feedback** servo **loop** ;

8/3,K/10 (Item 10 from file: 2)
DIALOG(R)File 2:INSPEC

05907470 INSPEC Abstract Number: B9505-3120B-023
Title: Sensitive and quick response micro magnetic sensor utilizing magneto-impedance in Co-rich amorphous wires
Author(s): Mohri, K.; Panina, I.V.; Uchiyama, T.; Bushida, K.; Noda, M.
Author Affiliation: Dept. of Electr. Eng., Nagoya Univ., Japan
Journal: IEEE Transactions on Magnetics vol.31, no.2 p.1266-75
Publication Date: March 1995 Country of Publication: USA
CODEN: IEMGAQ ISSN: 0018-9464
U.S. Copyright Clearance Center Code: 0018-9464/95/$04.00
Conference Title: Workshop on Rapidly Quenched Magnetic Wire and Applications
Conference Date: 24-25 June 1994 Conference Location: Albuquerque, NM, USA
Language: English
Subfile: B

...Abstract: degrees C with a maximum operating temperature of about 180 degrees C using a negative **feedback loop** in the sensor circuit, and (iv) small power consumption of less than 10 mW using a self-oscillation circuit, in which a MI element voltage decreases to **zero** (100% **change**) with an external field of about 2 Oe. The basic properties and mechanism of the...
...Identifiers: negative **feedback loop** ;

8/3,K/11 (Item 11 from file: 2)
DIALOG(R)File 2:INSPEC

05859375 INSPEC Abstract Number: C9503-1330-001

Title: Reliable linear-quadratic state-feedback control
Author(s): Veillette, R.J.
Author Affiliation: Dept. of Electr. Eng., Akron Univ., OH, USA
Journal: Automatica vol.31, no.1 p.137-43
Publication Date: Jan. 1995 Country of Publication: UK
CODEN: ATCAA9 ISSN: 0005-1098
U.S. Copyright Clearance Center Code: 0005-1098/95/$9.50+0.00
Language: English
Subfile: C

...Abstract: properties of the standard LQ regulator by tolerating the insertion of any independent gains from **zero** to infinity into **selected feedback loops** . They also guarantee a given performance bound despite the insertion of gains from zero to...
...Identifiers: **feedback loops** ;

8/3,K/12 (Item 12 from file: 2)
DIALOG(R)File 2:INSPEC

05711798 INSPEC Abstract Number: B9408-8360-081, C9408-3340H-188
Title: Testing power factor correction circuits for stability
Author(s): Venable, H.D.
Author Affiliation: Venable Ind. Inc., Austin, TX, USA
p.225-35
Publisher: Intertec Int, Ventura, CA, USA
Publication Date: 1993 Country of Publication: USA 875 pp.
ISBN: 0 931033 46 2
Conference Title: Power Quality '93. Official Proceedings of the Seventh International Power Quality Conference
Conference Date: 24-29 Oct. 1993 Conference Location: Irvine, CA, USA
Language: English
Subfile: B C

...Abstract: feature in new power supply designs. In a power factor correction circuit there are two **feedback** control **loops** . One **loop** operates by using the input voltage as a reference to control the input current. This...

... faster loop is much more difficult. The operating point of the faster loop is dynamically **changing** from near **zero** to the peak value of the input current. This paper discusses the techniques necessary to...
...Identifiers: **feedback** control **loops** ;

8/3,K/13 (Item 13 from file: 2)
DIALOG(R)File 2:INSPEC

05520612 INSPEC Abstract Number: B9312-8510-061, C9312-3340H-173
Title: Improvement of momentary torque compensation for impulsive-torque-drive speed control method
Author(s): Iwata, M.
Journal: Sanken Technical Report vol.24, no.1 p.14-25
Publication Date: Nov. 1992 Country of Publication: Japan
CODEN: STEQDU ISSN: 0285-9815
Language: Japanese
Subfile: B C

...Abstract: compensation loop with a constant primary flux amplitude, the basic algorithm of which was the **changeover** of a **zero** voltage vector from/to an exciting component voltage vector corresponding to conditions of a primary...

... system, the speed control and the torque control loop were separated by adding a torque **feedback loop** , and then a disturbance torque observer was added to them. Thus, an equivalent control system...
...Identifiers: torque **feedback loop** ;

8/3,K/14 (Item 14 from file: 2)
DIALOG(R)File 2:INSPEC
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04786246 INSPEC Abstract Number: B91000989
Title: Synthesis of filters in feedback loops **of circuits for the automatic compensation of periodic broadband FM signals**
Author(s): Chirkov, G.V.
Journal: Izvestiya Vysshikh Uchebnykh Zavedenii, Radioelektronika vol.32, no.8 p.75-7
Publication Date: 1989 Country of Publication: Ukrainian SSR, USSR
CODEN: IVUZB5 ISSN: 0021-3470
Translated in: Radioelectronics and Communication Systems vol.32, no.8 p.90-3
Publication Date: 1989 Country of Publication: USA
CODEN: RCSYDS ISSN: 0735-2727
U.S. Copyright Clearance Center Code: 0735-2727/89/$20.00
Language: English
Subfile: B

Title: Synthesis of filters in feedback loops **of circuits for the automatic compensation of periodic broadband FM signals**
...Abstract: the deviations of the modulation law from the required law and guarantees the achievement of **zero** error at **selected** information takeoff points, beginning with the second modulation period. The basis of the synthesis is...
...Identifiers: **feedback loops** ;

8/3,K/15 (Item 15 from file: 2)
DIALOG(R)File 2:INSPEC
(c) 2007 Institution of Electrical Engineers. All rts. reserv.

04389644 INSPEC Abstract Number: B89041566, C89037418
Title: A microprocessor-based control method for a voltage-fed inverter with a tank load
Author(s): Agu, M.U.
Author Affiliation: Dept. of Electr. Eng., Nigeria Univ., Nsukka, Nigeria
Conference Title: Conference Record of the 1988 Industry Applications Society Annual Meeting (IEEE Cat. No.88CH2565-0) p.1018-22 vol.1
Publisher: IEEE, New York, NY, USA
Publication Date: 1988 Country of Publication: USA 2 vol. 1928 pp.
U.S. Copyright Clearance Center Code: CH2565-0/88/0000-1018$01.00
Conference Sponsor: IEEE
Conference Date: 2-7 Oct. 1988 Conference Location: Pittsburgh, PA, USA
Language: English
Subfile: B C

...Abstract: the interval between given combinations of gating signals to perform two feedback control functions. One **feedback loop** maintains the power to the tank load at a desired constant value. The other feedback arrangement maintains the load power factor at unity by rapidly **adjusting** to **zero** any degree of detune between the natural tank load frequency and the inverter operating frequency...

8/3,K/16 (Item 16 from file: 2)

DIALOG(R)File 2:INSPEC

04252330 INSPEC Abstract Number: B88070567
Title: DC differential amplifier with periodic zero adjustment
Author(s): Meer, V.V.; Nesterov, V.I.; Yakovlev, V.A.
Journal: Pribory i Tekhnika Eksperimenta vol.30, no.6 p.121-3
Publication Date: Nov.-Dec. 1987 Country of Publication: USSR
CODEN: PRTEAJ ISSN: 0032-8162
Translated in: Instruments and Experimental Techniques vol.30, no.6, pt.2 p.1409-11
Publication Date: Nov.-Dec. 1987 Country of Publication: USA
CODEN: INETAK ISSN: 0020-4412
U.S. Copyright Clearance Center Code: 0020-4412/87/3006-1409$12.50
Language: English
Subfile: B

Title: DC differential amplifier with periodic zero adjustment
...Abstract: the gain, and the input impedance can be varied by changing the parameters of the **feedback loops** . The circuit employs five integrated circuits of series K574 and K564.
...Identifiers: periodic **zero adjustment** ; ...

... **feedback loops** ;

8/3,K/17 (Item 17 from file: 2)
DIALOG(R)File 2:INSPEC

04192132 INSPEC Abstract Number: B88054928, C88044553
Title: Pole-placement and model-order reduction techniques applied to a hydro-unit-system for dynamic stability improvement
Author(s): Papadopoulos, D.P.; Boglou, A.K.
Author Affiliation: Sch. of Eng., Democritus Univ. of Thrace, Xanthi, Greece
Journal: Journal of the Franklin Institute vol.325, no.3 p.403-17
Publication Date: 1988 Country of Publication: UK
CODEN: JFINAB ISSN: 0016-0032
U.S. Copyright Clearance Center Code: 0016-0032/88/$3.00+0.00
Language: English
Subfile: B C

...Abstract: power system (original open-loop system) by designing a suitable controller (i.e. a closed- **loop** system) with output **feedback** . Furthermore, an adequate reduced-order model of the original system is obtained by using three distinct **pole selection** criteria. The **pole** -placement method is also used to design an appropriate closed-loop system of the attained...
...Identifiers: **pole selection** criteria

8/3,K/18 (Item 18 from file: 2)
DIALOG(R)File 2:INSPEC

03784950 INSPEC Abstract Number: B87000911
Title: Sequential adaptation of recursive digital filters in cascade form
Author(s): Tam, Y.H.; Ching, P.C.
Author Affiliation: Dept. of Electron., Chinese Univ., Hong Kong, Shatin, Hong Kong
Journal: International Journal of Electronics vol.61, no.4 p.441-8
Publication Date: Oct. 1986 Country of Publication: UK
CODEN: IJELA2 ISSN: 0020-7217
U.S. Copyright Clearance Center Code: 0020-7217/86/$4.00

Language: English
Subfile: B

Abstract: A least mean square algorithm is described which sequentially **adjusts** **pole** - **zero** positions of an infinite impulse response (IIR) filter so as to minimize the equation error. The feedforward and **feedback** **paths** of the adaptive filter are separately realized as a cascade of second order sections and...
...Identifiers: **feedback** **paths** ;

8/3,K/19 **(Item 19 from file: 2)**
DIALOG(R)File 2:INSPEC

03613545 INSPEC Abstract Number: B86014351
Title: Determination of criteria for synthesizing active RC-filters with aero pole Q-sensitivity
Author(s): Gil'mutdinov, A.Kh.; Ushakov, P.A.
Journal: Izvestiya Vysshikh Uchebnykh Zavedenii, Radioelektronika vol.27, no.3 p.93-6
Publication Date: 1984 Country of Publication: Ukrainian SSR, USSR
CODEN: IVUZB5 ISSN: 0021-3470
Translated in: Radioelectronics and Communication Systems vol.27, no.3 p.108-10
Publication Date: 1984 Country of Publication: USA
CODEN: RCSYDS ISSN: 0735-2727
Language: English
Subfile: B

...Abstract: the high-frequency band, where the model consisting of one active element with finite gain, **looped** by positive **feedback** via a passive RC-circuit has attracted the most attention. However, in such a circuit...

... component. To eliminate this drawback it has been suggested that the position of the high- **selectivity** **pole** of the transfer function of the section should be stabilized by mutual compensation of the...
...Identifiers: high- **selectivity** **pole** ;

8/3,K/20 **(Item 20 from file: 2)**
DIALOG(R)File 2:INSPEC

03337239 INSPEC Abstract Number: C84048637
Title: On the identification of time-varying systems with an example of adaptive control
Author(s): Kalligeropoulos, D.
Journal: Regelungstechnik vol.32, no.8 p.271-5
Publication Date: Aug. 1984 Country of Publication: West Germany
CODEN: RLSTA5 ISSN: 0340-434X
Language: German
Subfile: C

...Abstract: to simulate time-varying noise corrupted temporarily unstable systems of higher order by a time- **varying** model of **zeroth** order. Based on this model an adaptive **feedback** control **loop** is then constructed, where the unknown system is simultaneously identified and controlled.
...Identifiers: adaptive **feedback** control **loop**

8/3,K/21 **(Item 21 from file: 2)**
DIALOG(R)File 2:INSPEC

02410753 INSPEC Abstract Number: A79083995, B79044520, C79026547
Title: A simple device for closed loop heart rate control during cardiac rehabilitation
Author(s): Aseltine, R.G., Jr.; Feldman, C.L.; Paraskos, J.A.; Moruzzi, R.L.
Author Affiliation: Medical Systems Div., General Electric Co., Milwaukee, WI, USA
Journal: IEEE Transactions on Biomedical Engineering vol.BME-26, no.8 p.456-64
Publication Date: Aug. 1979 Country of Publication: USA
CODEN: IEBEAX ISSN: 0018-9294
Language: English
Subfile: A B C

...Abstract: resistance in an earlobe photosensor due to the pulsatile blood flow of the earlobe. The **feedback loop** is achieved by a controller circuit driving a meter which the patient watches. The patient is instructed to maintain the meter needle on a **zero** -centered position by **adjusting** the rate at which he pedals an ordinary exercise bicycle. The heart rate as a...

8/3,K/22 (Item 22 from file: 2)
DIALOG(R)File 2:INSPEC

02343347 INSPEC Abstract Number: B79021401
Title: A contribution to the design of correction two- poles **for** modifying **the feedback characteristics of amplifiers**
Author(s): Zigmund, J.
Author Affiliation: TESLA, Vyzkumny Ustav Telekamunikaci, Praha, Czechoslovakia
Journal: Slaboproudy Obzor vol.40, no.1 p.27-30
Country of Publication: Czechoslovakia
CODEN: SLOZAE ISSN: 0037-668X
Language: Czech
Subfile: B

Title: A contribution to the design of correction two- poles **for** modifying **the feedback characteristics of amplifiers**
...Abstract: the occurrence of an excessive phase shift of the beta A transfer function within the **feedback loop** . Limiting conditions are derived for choosing the circuit elements for types of correction two-poles.

8/3,K/23 (Item 23 from file: 2)
DIALOG(R)File 2:INSPEC

01462524 INSPEC Abstract Number: B73000436
Title: The design of a tunable notch filter with variable Q
Author(s): Letellier, J.P.
Issued by: Naval Res. Lab., Washington, DC, USA
Publication Date: March 1972 Country of Publication: USA 26 pp.
Report Number: NRL-MR-2405
U.S. Govt. Clearinghouse Number: AD-740744
Language: English
Subfile: B

...Abstract: method used to combat such a resonance is to place a notch filter in the **feedback loop** to reduce gain at the resonance frequency, while allowing frequencies outside the notch to pass...

... the Q can be adjusted to cover the resonance, and the notch attenuation can be **adjusted** for essentially **zero** transmission at the center frequency. The filter is of simple design and easily constructed. The...

8/3,K/24 (Item 24 from file: 2)
DIALOG(R)File 2:INSPEC

01104402 INSPEC Abstract Number: B70008835, C70004523
Title: An analogue method for analysing an automated electric drive
Author(s): Korytin, A.M.
Journal: Elektrotekhnika vol.40, no.1 p.10-13
Publication Date: 1969 Country of Publication: USSR
CODEN: ELKTAQ ISSN: 0013-5860
Language: Russian
Subfile: B C

...Abstract: drawn up to represent the mechanical control characteristics of the device, together with the necessary **feedback loops** , all in a generalised form, showing how these relate to the output coordinates and input...

... signals representing the output coordinates and disturbances respectively. The combination of these two signals, is **adjusted** to **zero** volts on the output summator of the analogue. A method of calculating the scale coefficients is described. A method is also described for synthesising the parameters of delay and linear **feedback loops** for a given mechanical characteristic.

8/3,K/25 (Item 25 from file: 2)
DIALOG(R)File 2:INSPEC

01080044 INSPEC Abstract Number: B70002148, C69011970
Title: Modifications to the Zero Gradient synchrotron ring magnet power supply generator excitation control
Author(s): Sellers, J.F.; Rohrmayer, A.
Author Affiliation: Argonne Nat. Lab., IL, USA
Journal: IEEE Transactions on Nuclear Science vol.S-16, no.3 p. 697-8
Publication Date: June 1969 Country of Publication: USA
CODEN: IETNAE ISSN: 0018-9499
Language: English
Subfile: B C A

Title: Modifications to the Zero Gradient synchrotron ring magnet power supply generator excitation control
...Abstract: during constant field periods (flattop), and decrease during inversion. A static exciter having a closed- **loop feedback** control system is used to optimize the generator voltage.

8/3,K/26 (Item 26 from file: 2)
DIALOG(R)File 2:INSPEC

0000695475 INSPEC Abstract Number: 1964B12859
Title: Return difference and null return difference of a feedback system
Author(s): Sun, H.H.; Reis, G.C.
Journal: IEEE Transactions on Automatic Control AC-9 1 p.109-110
Publication Date: Jan. 1964 Country of Publication: USA
Language: English

Subfile: C
Copyright 2004, IEE

Abstract: In a feedback system which involves a parameter k contained in a **feedback loop** , the return ratio of the system, with respect to k, is the amount of signal...

... other side of the parameter k. The signal obtained thus represents the gain of the **feedback loop** or the **loop** gain of the system in a single-**loop feedback** system. The value of this loop gain must be obtained under the condition that the...

...ratio is defined as the return ratio under the condition, that the input signal is **adjusted** to give **zero** output. The null return difference is defined as one minus the null return ratio. In...

8/3,K/27 (Item 27 from file: 2)
DIALOG(R)File 2:INSPEC
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0000691972 INSPEC Abstract Number: 1964B09356
Title: Stabilization of a gamma scintillation spectrometer against zero and gain drifts
Author(s): Dudley, R.A.; Scarpatetti, R.
Journal: Nuclear Instruments and Methods 25 2 p.297-313
Publication Date: Jan. 1964 Country of Publication: Netherlands
Language: English
Subfile: B C
Copyright 2004, IEE

...Abstract: other gamma rays, but does not store the counts in its memory. The stabilization device **adjusts zero** and gain, by means of feedback voltages applied to analyser window threshold and photomultiplier dynode...

... is used for all experimental spectra (without, however, contributing appreciably to background), and the stabilization **feedback loop** encompasses the entire analogue portion of the spectrometer.

8/3,K/28 (Item 28 from file: 2)
DIALOG(R)File 2:INSPEC
(c) 2007 Institution of Electrical Engineers. All rts. reserv.

0000537773 INSPEC Abstract Number: 1960B04544
Title: A new approach to the linear design and analysis of phase-locked loops
Author(s): Weaver, C.S.
Journal: Institute of Radio Engineers Transactions on Space Electronics and Telemetry SET-5 4 p.166-178
Publication Date: Dec. 1959 Country of Publication: USA
Language: English
Subfile: C
Copyright 2004, IEE

...Abstract: and philosophy of control systems theory, the phase-locked loop is analysed as a conventional **feedback loop** . The root-locus method yields graphs which specify how the transient response changes with signal ...

... signal strength or modulation may cause complete loss of detection. Charts show how the transients **vary** with various **pole - zero** patterns for both step and ramp inputs. The feedback equation shows why the phase-locked...

8/3,K/29 (Item 1 from file: 6)
DIALOG(R)File 6:NTIS

1271331 NTIS Accession Number: NTN86-1187
Microprocessor Control of Recoil: Processor chip would ensure uniform response to recoil forces and a constant retarding force
(NTIS Tech Note)
Army Materiel Development and Readiness Command, Alexandria, VA.
Corp. Source Codes: 047809000
Sponsor: Department of the Army, Washington, DC.
Nov 86 1p
Languages: English
Journal Announcement: GRAI8702
FOR ADDITIONAL INFORMATION: Detailed information about the technology described may be obtained by ordering the NTIS report order number: AD-A155304/NAA, price code: A05.
NTIS Prices: Not available NTIS

... releasing a portion of the recoil energy. The counterrecoil buffer reduces counterrecoil velocity of the **moving** parts to **zero** through a hydraulic-fluid throttling process like that in the recoil brake. Variations in maximum...

... variations. The servo valve is envisioned as a constantly variable orifice operated by a closed- **loop** **feedback** system.

8/3,K/30 (Item 2 from file: 6)
DIALOG(R)File 6:NTIS

0788441 NTIS Accession Number: AD-A074 092/8/XAB
Design Criteria for Optimal Flight Control Systems
(Final rept. Jan-Nov 78)
Govindaraj, K. S. ; Rynaski, E. G. ; Fam, A. T.
Calspan Advanced Technology Center, Buffalo, NY.
Corp. Source Codes: 058685000; 410803
Sponsor: Office of Naval Research, Arlington, VA
Report No.: CALSPAN-6248-F-1; ONR-CR215-259-1F
7 Sep 79 95p
Languages: English
Journal Announcement: GRAI8001
Prepared in cooperation with the State Univ. of New York at Buffalo. Dept. of Systems Engineering.
Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.
NTIS Prices: PC A05/MF A01

... given weighting matrix on the controls. The performance index matrix constructed at each step to **move** the **poles** and **zeros** is added to get a final performance index matrix that **moves** the open-loop **poles** and zeros to more desirable locations. A control system design example with the X-22A...

... the weighting matrices on the states and control, and in the second design technique, the **change** in the **pole** - **zero** locations is determined under perturbations in the performance index matrices.
Descriptors: *Flight control systems; Closed **loop** systems; **Feedback** ; Transfer functions; Matrices(Mathematics)

8/3,K/31 (Item 3 from file: 6)
DIALOG(R)File 6:NTIS

0762436 NTIS Accession Number: AD-A067 265/9/XAB
Optimal Feedback Controls for Parameter Identification
(Final rept)
Olmstead, D. N.
Air Force Avionics Lab Wright-Patterson AFB OH
Corp. Source Codes: 011670
Report No.: AFAL-TR-79-1022
Feb 79 177p
Languages: English Document Type: Thesis
Journal Announcement: GRAI7917
Doctoral thesis.
Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.
NTIS Prices: PC A09/MF A01

...linear discrete system from noisy measurements by the use of a control consisting of a **feedback** term and open- **loop** term. The **feedback** term allows one to **move** the **poles** of the system to location which improve the information in the output about the parameters...
Descriptors: *Control theory; *Parametric analysis; Mathematical models; Identification; **Feedback** ; Open **loop** systems; Closed loop systems; Input ; Noise reduction; Algorithms; Probability; Eigenvalues; Linear systems; Fire control systems...

8/3,K/32 (Item 4 from file: 6)
DIALOG(R)File 6:NTIS

0695499 NTIS Accession Number: AD-A053 144/2/XAB
Active-R Bandpass Filter Design Using Hybrid-Pi Transistor Model
(Final rept)
Roth, L. C.
Missouri Univ-Rolla Dept of Electrical Engineering
Corp. Source Codes: 408389
20 Mar 78 78p
Document Type: Thesis
Journal Announcement: GRAI7815
Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.
NTIS Prices: PC A05/MF A01

... resistor, also given in terms of the center frequency and bandwidth, is then used to **move** the **poles** to the final location. A test circuit is constructed and compared with a computer simulation...
Descriptors: *Bandpass filters; *Bipolar transistors; Frequency response; **Feedback** ; Open **loop** systems; Fabrication; Comparison; Computerized simulation; Test methods; Limitations; Circuit analysis; Theses

8/3,K/33 (Item 5 from file: 6)
DIALOG(R)File 6:NTIS

0609765 NTIS Accession Number: AD-820 673/2/XAB
Network Synthesis and Sensitivity Research

(Final rept. Jun 66-Jun 67)
Horowitz, I. M. ; Storch, L.
Hughes Aircraft CO Culver City Calif Guidance and Controls Div
Corp. Source Codes: 401771
Report No.: AFAL-TR-67-221
Sep 67 109p
Journal Announcement: GRAI7709
Distribution limitation now removed. Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.
NTIS Prices: PC A06/MF A01

...existence of uniform variations in classes of element values, in order to achieve zero system **pole** movement, for large **changes** in element values. This is an extension of Gaash's work who showed how zero...

... element variations. There are presented research results in the problem of unified synthesis of single- **loop** **feedback** amplifiers to achieve prescribed gain, pole-zero pattern and sensitivity to active parameter variations. The...

8/3,K/34 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

08689116 E.I. No: EIP00105369444
Title: 71 Msample/sec fifth order sigma-delta digital modulator
Author: Gao, Yonghong; Tenhunen, Hannu
Corporate Source: Royal Inst of Technology, Stockholm, Sweden
Conference Title: 1999 IEEE 42nd Midwest Symposium on Circuits and Sistems
Conference Location: Las Cruces, NM, USA Conference Date: 19990808-19990811
E.I. Conference No.: 57420
Source: Midwest Symposium on Circuits and Systems v 1 1999. IEEE, Piscataway, NJ, USA,99CB36356. p 456-459
Publication Year: 1999
CODEN: MSCSDL
Language: English

...Abstract: the structure of the modulator is carefully selected in order to reduce the latency in **feedback** **loops** . Carry-save adders are also utilized to facilitate high-speed operation. Based on the analysis and simulation results, simple feedback coefficients for **adjusting** the NTF **zero** positions are employed and the internal word-length is scaled down without significant degradation of...

8/3,K/35 (Item 2 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

08541527 E.I. No: EIP00045147333
Title: Stable adaptive control for a class of nonlinear systems using a modified Lyapunov function
Author: Zhang, T.; Ge, S.S.; Hang, C.C.
Corporate Source: Natl Univ of Singapore, Singapore
Source: IEEE Transactions on Automatic Control v 45 n 1 2000. p 129-132
Publication Year: 2000
CODEN: IETAA9 ISSN: 0018-9286
Language: English

...Abstract: system is proven to be globally stable, and the output

tracking error converges to an 1adjustable neighborhood of **zero** . (Author abstract) 14 Refs.
Descriptors: *Control system synthesis; Nonlinear control systems; Adaptive control systems; System stability; Lyapunov methods; Linearization ; **Feedback** control; Closed **loop** control systems; Convergence of numerical methods; Poles and zeros

8/3,K/36 (Item 3 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

07875014 E.I. No: EIP97113939201
Title: MATLAB tools for linear and nonlinear system stability theorem implementation
Author: Taylor, James H.; Chan, Cheney
Corporate Source: Univ of New Brunswick, Fredericton, NB, Can
Conference Title: Proceedings of the 1997 IEEE International Conference on Control Applications
Conference Location: Hartford, CT, USA Conference Date: 19971005-19971007
E.I. Conference No.: 47385
Source: IEEE Conference on Control Applications - Proceedings 1997. IEEE, Piscataway, NJ, USA,97CH36055. p 42-47
Publication Year: 1997
CODEN: ICOAE8
Language: English

...Abstract: represents the number of unstable (right-half plane) poles that will occur in a closed- **loop** system with **feedback** gain k if the point minus 1/k is located in that region. The second...
Descriptors: *System stability; Linear control systems; Nonlinear control systems; Computer aided software engineering; Stability criteria; Closed **loop** control systems; **Feedback** ; Poles and **zeros** ; Nyquist diagrams; Time **varying** control systems

8/3,K/37 (Item 4 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

06981310 E.I. No: EIP94112400025
Title: Construction and parameterization of all static and dynamic H//2-optimal state feedback solutions for discrete time systems
Author: Chen, Ben M.; Shamash, Yacov
Corporate Source: Natl Univ of Singapore, Singapore
Conference Title: Proceedings of the 32nd Conference on Decision and Control
Conference Location: San Antonio, TX, USA Conference Date: 19931215
E.I. Conference No.: 20202
Source: Proceedings of the IEEE Conference on Decision and Control v 1 1993. IEEE, Piscataway, NJ, USA. p 126-131
Publication Year: 1993
CODEN: PCDCDZ ISSN: 0191-2216
Language: English

...Abstract: It is shown that both the sets of optimal fixed modes and optimal fixed decoupling **zeros** do not **vary** depending upon whether the static or the dynamic controllers are used. Most of the results...
Identifiers: Optimal state **feedback** ; Closed **loop** system; Optimal fixed mode

8/3,K/38 (Item 5 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

06875926 E.I. No: EIP94061313436
Title: Logarithmic root loci for continuous-time loops
Author: Glaria, Jaime; Rojas, Ricardo; Salgado, Mario
Corporate Source: Universidad Tecnica Federico Santa Maria, Valparaiso, Chile
Source: IEEE Control Systems Magazine v 14 n 2 Apr 1994. p 47-52
Publication Year: 1994
CODEN: ISMAD7 ISSN: 0272-1708
Language: English

Identifiers: Logarithmic root loci; Continuous time loops; Closed **loop** frequency response; **Feedback** control system; Parameter **modification** ; Closed loop **pole** angles

8/3,K/39 (Item 6 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

06559799 E.I. Monthly No: EIM9302-008228
Title: Computational approach for the ' selection ' of closed-loop pole locations.
Author: Misra, Pradeep; Shaw, Arnab K.
Corporate Source: Wright State Univ, Dayton, OH, USA
Conference Title: Proceedings of the 1992 American Control Conference
Conference Location: Chicago, IL, USA Conference Date: 19920624
E.I. Conference No.: 17380
Source: Proceedings of the American Control Conference v 1. Publ by American Automatic Control Council, Green Valley, AZ, USA. p 78-82
Publication Year: 1992
CODEN: PRACEO ISSN: 0743-1619 ISBN: 0-7803-0210-9
Language: English

Title: Computational approach for the ' selection ' of closed-loop pole locations.
...Abstract: known, it is always possible under certain conditions to determine the feedback compensator. However, the **selection** of closed-loop **pole** location is based on heuristics and the designers' experience. In this paper, it is shown...
Identifiers: CLOSED **LOOP** SYSTEMS; **FEEDBACK** CONTROL

8/3,K/40 (Item 7 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

06417186 E.I. Monthly No: EIM9204-020217
Title: Tracking control of a nonminimum-phase flexible manipulator.
Author: Kwon, Dong-Soo; Book, Wayne J.
Corporate Source: Georgia Inst of Technology, Atlanta, GA, USA
Conference Title: Winter Annual Meeting of the American Society of Mechanical Engineers
Conference Location: Atlanta, GA, USA Conference Date: 19911201
E.I. Conference No.: 15922
Source: Modelling and Control of Compliant and Rigid Motion Systems American Society of Mechanical Engineers, Dynamic Systems and Control Division (Publication) DSC v 31. Publ by ASME, New York, NY, USA. p 27-37
Publication Year: 1991
CODEN: ASMDEV ISBN: 0-7918-0862-9
Language: English

...Abstract: the desired flexible coordinate values, which match equivalent to the tip position trajectory dynamically. The **feedback loop**

achieves tracking capability with the calculated desired flexible coordinate trajectories. The control scheme has been...

...parts. Through simulation and experiment, we explore the effectiveness and limitations of this method for **moving** non- **zero** initial condition cases. (Author abstract) 22 Refs.

8/3,K/41 (Item 8 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

06085825 E.I. Monthly No: EI9107077877
Title: A new tool for the analysis of modal control laws: The 'pole attractors'.
Author: Magni, Jean-Francois; Champetier, Calixte; Menard, Philippe
Corporate Source: Centre d'Etude et de Recherche de Toulouse, France
Source: IEEE Transactions on Automatic Control v 36 n 2 Feb 1991 p 219-223
Publication Year: 1991
CODEN: IETAA9 ISSN: 0018-9286
Language: English

...Abstract: assignment of right eigenvectors often induces weakly observable poles. The reluctance of the feedback to **move** these **poles** away can be represented by some attracting zones of the complex plane called pole attractors...
Identifiers: MODAL CONTROL LAWS; POLE ATTRACTORS; CLOSED **LOOP** EIGENVALUES; OUTPUT **FEEDBACK** CASE; AIRCRAFT AUTOPILOT

8/3,K/42 (Item 9 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

06085112 E.I. Monthly No: EI9107082181
Title: Magnetometer based on an integrated DC relaxation squid.
Author: Gudoshnikov, S. A.; Maslennikov, Yu. V.; Reznikov, A. Ye.; Snigirev, O. V.
Source: Soviet Journal of Communications Technology & Electronics (English translation of Radiotekhnika i Elektronika) v 35 n 8 1990 p 117-119
Publication Year: 1990
CODEN: SJCEEH ISSN: 8756-6648
Language: English

...Abstract: the characteristics of the magnetometer without the pickup loop with a test signal in a **feedback loop** along the **zero adjustment** circuit. To measure the sensitivity of the device with a pickup loop under laboratory conditions...

8/3,K/43 (Item 10 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

06079331 E.I. Monthly No: EIM9106-027289
Title: Observer feedback compensator and cascade PD compensator design based on loop transfer recovery.
Author: Tsui, Chia-Chi
Corporate Source: Dept of Appl Sci, Coll of Staten Island, New York, NY, USA
Conference Title: Proceedings of the 1990 American Control Conference
Conference Location: San Diego, CA, USA Conference Date: 19900523
E.I. Conference No.: 14483

Source: Proceedings of the American Control Conference. Publ by American Automatic Control Council, Green Valley, AZ, USA (IEEE cat n 90CH2896-9). p 930-935
Publication Year: 1990
CODEN: PRACEO ISSN: 0743-1619
Language: English

...Abstract: observer poles to be clustered around any set of system zeros, while other approximate observer **pole selection** solutions may also exist. With this new and explicit understanding of the importance of system...
Identifiers: LOOP TRANSFER RECOVERY; OPEN **LOOP** SYSTEMS; **FEEDBACK** COMPENSATORS

8/3,K/44 (Item 11 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

06039038 E.I. Monthly No: EIM9103-012954
Title: Robust current mode control of switching DC-DC converters.
Author: Ojo, Olorunfemi; Radman, Ghadir
Corporate Source: Dept of Electr Eng, Tennessee Technol Univ, Cookeville, TN, USA
Conference Title: Proceedings of the 22nd Southeastern Symposium on System Theory
Conference Location: Cookeville, TN, USA Conference Date: 19900311
E.I. Conference No.: 14058
Source: Proceedings of the Annual Southeastern Symposium on System Theory. Publ by IEEE, IEEE Service Center, Piscataway, NJ, USA (IEEE cat n 90TH0301-2). p 204
Publication Year: 1990
CODEN: PASTDB ISBN: 0-8186-2038-2
Language: English

...Abstract: nonexciting and limited-time-exciting commands and disturbances in the input voltage and that also **alter** the **zeros** of the resulting closed-loop system; (2) a servocompensator positioned in the forward loop path...
Identifiers: CLOSED **LOOP** SYSTEMS; **FEEDBACK** CONTROL; SUMMARY ONLY

8/3,K/45 (Item 12 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

05905910 E.I. Monthly No: EIM9005-022171
Title: Current pulse control of high frequency series resonant DC link power converter.
Author: Murai, Y.; Mochizuki, S.; Caldeira, P.; Lipo, T. A.
Corporate Source: Dep of Electron & Comput Eng, Gifu Univ, Gifu, Jpn
Conference Title: Conference Record of the 1989 IEEE Industry Applications Society Annual Meeting - Presented at the 24th IAS Annual Meeting. Part I
Conference Location: San Diego, CA, USA Conference Date: 19891001
E.I. Conference No.: 13074
Source: Conference Record - IAS Annual Meeting (IEEE Industry Applications Society) n pt 1. Publ by IEEE, IEEE Service Center, Piscataway, NJ, USA. Available from IEEE Service Cent (cat n 89CH2792-0), Piscataway, NJ, USA. p 1023-1030
Publication Year: 1989
CODEN: CIASDZ ISSN: 0160-8592
Language: English

...Abstract: current pulses utilizing an auxiliary circulating thyristor

is presented. As the current pulses can be **adjusted** continuously from almost **zero** to full size, the output voltage waveform can be improved and the instability is removed...
Identifiers: RESONANT POWER CONVERSION; HF SERIES RESONANT POWER CONVERTER; AC/AC POWER CONVERSION; VOLTAGE **FEEDBACK LOOP** CONTROL; CURRENT PULSE CONTROL

8/3,K/46 (Item 13 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

05632353 E.I. Monthly No: EI8809082467
Title: MODIFIED POLE **-ASSIGNMENT CONTROLLER FOR PLANT MODELS WITH EXACT OR NEAR POLE-ZERO CANCELLATON.**
Author: Halpern, M. E.
Corporate Source: Aeronautical Research Lab, Melbourne, Aust
Source: IEE Proceedings, Part D: Control Theory and Applications v 135 n 3 May 1988 p 189-195
Publication Year: 1988
CODEN: IPDAD9 ISSN: 0143-7054
Language: English

Title: MODIFIED POLE **-ASSIGNMENT CONTROLLER FOR PLANT** MODELS WITH **EXACT OR NEAR POLE-ZERO CANCELLATON.**
...Abstract: controllers designed explicitly to minimize variances due to noise. The use of the technique to **select** some closed loop **poles** in an adaptive control system where the order of the plant model has been overspecified...
Identifiers: POLE-ASSIGNMENT CONTROLLER; POLE-ZERO CANCELLATION; WEIGHTED LEAST-SQUARES APPROACH; OUTPUT **FEEDBACK** ; CLOSED **LOOP** POLES

8/3,K/47 (Item 14 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

05556083 E.I. Monthly No: EIM8804-019216
Title: POWER SYSTEM STABILIZER DESIGN BY AN ALTERNATIVE POLE **ASSIGNMENT.**
Author: Lin, C. E.; Chen, T. C.; Haung, C. L.
Corporate Source: Cheng Kung Univ, Tainan, Taiwan
Conference Title: Proceedings of the Nineteenth Annual North American Power Symposium.
Conference Location: Edmonton, Alberta, Can Conference Date: 19871022
E.I. Conference No.: 10797
Source: Publ by IEEE, New York, NY, USA. Available from IEEE Service Cent (Cat n 87CH2501-5), Piscataway, NJ, USA p 453-458
Publication Year: 1987
Language: English

Title: POWER SYSTEM STABILIZER DESIGN BY AN ALTERNATIVE POLE **ASSIGNMENT.**
Identifiers: POLE ASSIGNMENT; POWER SYSTEM STABILIZER; DYNAMIC STABILITY; **FEEDBACK** GAIN; CLOSED- **LOOP** POLES

8/3,K/48 (Item 15 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

04870561 E.I. Monthly No: EIM8505-027233
Title: NEW APPROACH TO THE PROBLEM OF POLE ASSIGNMENT THROUGH OUTPUT FEEDBACK.
Author: Sevaston, George E.

Corporate Source: Rutgers Univ, Dep of Electrical Engineering, Piscataway, NJ, USA
Conference Title: Proceedings of the 1984 American Control Conference.
Conference Location: San Diego, CA, USA Conference Date: 19840606
E.I. Conference No.: 04990
Source: Proceedings of the American Control Conference 1984 v 1. Publ by IEEE, New York, NY, USA. Available from IEEE Service Cent (Cat n 84CH2024-8), Piscataway, NJ, USA p 378-380
Publication Year: 1984
CODEN: PRACEO
Language: English

Identifiers: FEASIBLE DIRECTIONS SEARCH PROCEDURE; SYSTEMATIC NUMERICAL SEARCH; MOORE-PENROSE PSEUDO-INVERSE; CLOSED **LOOP** **POLE** LOCATIONS; **FEEDBACK** MATRIX **CHANGES** ; DISTINCT EIGENVALUE RESTRICTION

8/3,K/49 (Item 16 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

04580704 E.I. Monthly No: EI8410101572 E.I. Yearly No: EI84027501
Title: Identification of Time-varying Systems with an Example of Adaptive Control.
Title: UEBER DIE IDENTIFIZIERUNG ZEITVARIABLER SYSTEME MIT EINEM BEISPIEL ADAPTIVER REGELUNG.
Author: Kalligeropoulos, D.
Source: Regelungstechnik RT v 32 n 8 Aug 1984 p 271-275
Publication Year: 1984
CODEN: RERTDM
Language: ENGLISH

...Abstract: to simulate time-varying noise-corrupted temporarily unstable systems of higher order by a time- **varying** model of **zeroth** order. Based on this model an adaptive **feedback** control **loop** is then constructed, where the unknown system is simultaneously identified and controlled. 8 refs. In...

8/3,K/50 (Item 17 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

03805454 E.I. Monthly No: EI7904028587 E.I. Yearly No: EI79080837
Title: RAMP GENERATOR GIVES SERVOS SEPARATE ACCELERATION AND DECELERATION LIMITS.
Author: Kelly, R. E.
Corporate Source: Southwest Res Inst, San Antonio, Tex
Source: Electronic Design v 27 n 2 Jan 18 1979 p 102
Publication Year: 1979
CODEN: ELODAW ISSN: 0013-4872
Language: ENGLISH

...Abstract: circuit shown in this article between the speed control and the input to the main **feedback** **loop** of a rate servo. This circuit eliminates the sacrifice in performance suffered by circuits using...

...If the input is large, the circuit selects the acceleration limit. Given a small or **zero** input, the circuit **selects** the deceleration limit. Output comes from a ramp generator combined with a comparator in a negative **feedback** **loop** . The comparator amplifies the difference between the circuit's input and output signals, causing the...

8/3,K/51 (Item 18 from file: 8)

DIALOG(R)File 8:Ei Compendex(R)

03445316 E.I. Monthly No: EI7504021836 E.I. Yearly No: EI75008022
Title: UNDERSTANDING FEEDFORWARD CONTROL.
Author: Cho, Chun H.
Corporate Source: Fisher Controls Co
Source: Power v 119 n 2 Feb 1975 p 77-79
Publication Year: 1975
CODEN: POWEAD ISSN: 0032-5929
Language: ENGLISH

...Abstract: and drum-level signals, producing balanced changes in feedwater flow. Most summing elements also have **zero adjustments** , to cancel the bias outputs of the steam-flow transmitters so that only deviations from...

...is used to heat feedwater, heating-system water, or other stock fluids. With a pure **feedback loop** , stock outlet temperature is monitored and used to control the steam into the exchanger. When...

8/3,K/52 (Item 19 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

03401410 E.I. Monthly No: EI7410060170
Title: PREVENT OP-AMP OUTPUT INSTABILITY.
Author: Wojslaw, Charles F.
Corporate Source: Natl Semicond, Santa Clara, Calif
Source: Electronic Design v 22 n 17 Aug 16 1974 p 98-100
Publication Year: 1974
CODEN: ELODAW ISSN: 0013-4872
Language: ENGLISH

...Abstract: occurs. Stability is improved because a greater range of gain can be tolerated before the **poles** become complex. An **alternative** solution isolates the load and modifies the **feedback loop** of the amplifier.

8/3,K/53 (Item 20 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

0001573673 E.I. No: 19620020910
Title: Voltage-controlled oscillator uses negative feedback
Author: Bell, N.W.; Chiunti, V.
Source: Electronics v 35 n 11 Mar 16 1962 (New York, NY United States), p 64-65
Publication Year: 1962
Language: English

Abstract: Specially designed pulse counting discriminator circuit in **feedback loop** which gives voltage controlled oscillator adequate linearity for computing applications; oscillator output frequency **varies** between **zero** and 10 mv; linearity and stability are 0.1% at maximum frequency.

8/3,K/54 (Item 1 from file: 35)
DIALOG(R)File 35:Dissertation Abs Online

01341283 ORDER NO: AAD13-54069

H(INFINITY) STATE- FEEDBACK **WITH CLOSED-** LOOP **TRANSFER RECOVERY (H(INFINITY)/CLTR) DESIGN METHOD**
Author: AL-DAWAISH, HUSSAIN NASER
Degree: M.S.
Year: 1991
Corporate Source/Institution: KING FAHD UNIVERSITY OF PETROLEUM AND MINERALS (SAUDI ARABIA) (1088)
Source: VOLUME 32/02 of MASTERS ABSTRACTS.
PAGE 676. 170 PAGES

H(INFINITY) STATE- FEEDBACK **WITH CLOSED-** LOOP **TRANSFER RECOVERY (H(INFINITY)/CLTR) DESIGN METHOD**

...is developed. For this method, it is shown that the controller computations will reduce to **selecting** the **zeros** of the controller, and the poles of the controller will be the same as the...

8/3,K/55 (Item 1 from file: 95)

01006032 I96070345248
Topological aspects of universal adaptive stabilization
(Topologische Aspekte der universellen adaptiven Stabilisierung)
Townley, S
Dept. of Math., Exeter Univ., UK
SIAM Journal on Control and Optimization, v34, n3, pp1044-1070, 1996
Document type: journal article Language: English
Record type: Abstract
ISSN: 0363-0129

ABSTRACT:
...output-driven differential equation. For each initial condition the state of the system converges to **zero** and the time- **varying** gain matrix converges to a limit gain. We consider two related problems. The first concerns...
DESCRIPTORS: ADAPTIVE CONTROL; CONTROL THEORY; TOPOLOGY; DIFFERENTIAL EQUATIONS; **FEEDBACK** ; MATRIX ALGEBRA; CLOSED **LOOP** CONTROL SYSTEM ROBUSTNESS; LINEAR SYSTEM; OUTPUT SIGNAL; TRANSFER CHARACTERISTICS; CONTROL SYSTEMS

8/3,K/56 (Item 2 from file: 95)

00650071 I92128073927
Control of linear discrete-time periodic systems: a decentralized control approach
(Regelung eines linearen zeitdiskreten zeitveraenderlichen periodischen Systems: die dezentrale Regelung als Loesungsweg)
Yan, W-Y; Bitmead, RR
Dept. of Syst. Eng., Australian Nat. Univ., Canberra, ACT, Australia
IEEE Transactions on Automatic Control, v37, n10, pp1644-1648, 1992
Document type: journal article Language: English
Record type: Abstract
ISSN: 0018-9286

DESCRIPTORS: MULTIVARIABLE CONTROL; LINEAR SYSTEM; DISCRETE TIME SYSTEMS; CYCLIC ACTION; CLOSED **LOOP** CONTROL SYSTEM ROBUSTNESS; **FEEDBACK** ; DECENTRALIZED CONTROL; **ZERO** ROOT; TIME **VARYING** SYSTEMS

8/3,K/57 (Item 1 from file: 144)

DIALOG(R)File 144:Pascal

08478181 PASCAL No.: 89-0026948
New approach to robust observer design
CHIA-CHI TSUI
Northeastern univ., dep. electrical computer eng., Boston MA 02115, USA
Journal: International Journal of Control, 1988, 47 (3) 745-751
Language: English

... basee sur le developpement recent de solutions de synthese d'un observateur, la methode de **selection** de **poles** de l'observateur, peut etre formulee de facon a minimiser le gain de l'observateur...

English Descriptors: Observer; Transfer function; Closed **loop** ; Robustness ; State **feedback** ; Pole assignment; Compensator; Minimization; Grains

8/3,K/58 (Item 1 from file: 239)
DIALOG(R)File 239:Mathsci

02294445 MR 92j#93057
Neural networks with local memory for control systems.
Rodin, Ervin Y. (Systems Science and Mathematics, Washington University, St. Louis, Missouri, 63130)
Wu, Yuanlan (Systems Science and Mathematics, Washington University, St. Louis, Missouri, 63130)
Corporate Source Codes: 1-WASN-B; 1-WASN-B
Appl. Math. Lett.
Applied Mathematics Letters. An International Journal of Rapid Publication, 1991, 4, no. 5, 97--101. ISSN: 0893-9659
Language: English
Subfile: MR (Mathematical Reviews) AMS
Abstract Length: MEDIUM (24 lines)
Reviewer: Mertzios, B. G. (GR-THRC-EE)

...representation of single-input, single-output systems, using a neural network formulation. There exist no **feedback** **loops** and the only control parameters are the weights among the elementary **feedback** **loops** of the state variables. Therefore the dynamics of the given system (i.e. the spectrum of the **poles**) are not **changed** by varying the weights of the network. The matrix A of the state-space realization...

8/3,K/59 (Item 2 from file: 239)
DIALOG(R)File 239:Mathsci

01245390 MR 39##6684
Nonlinear time varying feedback systems---conditions for $L\sb{\infty}$-boundedness derived using conic operators on exponentially weighted spaces.
Proc. Third Annual Allerton Conf. on Circuit and System Theory
Zames, G.
1965,
Univ. Illinois, Urbana, Ill.; pp. 460--471,
Language: English
Subfile: MR (Mathematical Reviews) AMS
Abstract Length: MEDIUM (19 lines)

Author's summary: ``In the design of input-output feedback systems such as **feedback** amplifiers, phase-locked **loops** , etc., it is required to predict, and if possible prevent, instabilities in which bounded inputs...

...the sense that no restrictions are placed on linearity or time invariance of the open **loop feedback** elements or on dimensionality or continuity of inputs; input-output relations of the loop elements...

...sector nonlinearity, (iii) a time-varying gain, and (iv) a linear `R.C.' multiplier having **poles** and **zeros** **alternating** on the negative real axis.''

8/3,K/60 (Item 3 from file: 239)
DIALOG(R)File 239:Mathsci

01115877 MR 22##6659
The problem of optimizing systems which contain essentially nonlinear elements.
Merkulova, E. P.
Automat. Remote Control
1959, 20, 1303--1313
Source: Avtomat. i Telemeh., 20, 1335--1344 (Russian. English summary); translated as
Language: Russian Summary Language: English
Subfile: MR (Mathematical Reviews) AMS
Abstract Length: MEDIUM (22 lines)
Reviewer: Zadeh, L. A.

The author considers a nonlinear single **loop** **feedback** system comprising fixed memoryless nonlinear two-poles, a fixed linear two- **pole** and an **adjustable** linear correcting network. The system is assumed to be subjected to a random input consisting...
?

9/3,K/1 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

03445316 E.I. Monthly No: EI7504021836 E.I. Yearly No: EI75008022
Title: UNDERSTANDING FEEDFORWARD CONTROL.
Author: Cho, Chun H.
Corporate Source: Fisher Controls Co
Source: Power v 119 n 2 Feb 1975 p 77-79
Publication Year: 1975
CODEN: POWEAD ISSN: 0032-5929
Language: ENGLISH

...Abstract: and drum-level signals, producing balanced changes in feedwater flow. Most summing elements also have **zero adjustments** , to cancel the bias outputs of the steam-flow **transmitters** so that only deviations from normal affect the feedwater valve. Feedforward elements can also improve...

...is used to heat feedwater, heating-system water, or other stock fluids. With a pure **feedback loop** , stock outlet temperature is monitored and used to control the steam into the exchanger. When...
?

14/3,K/1 (Item 1 from file: 2)
DIALOG(R)File 2:INSPEC

07557207 INSPEC Abstract Number: A2000-10-0750-004, B2000-05-7230-047
Title: A capacitive transducer for monitoring tridimensional submicrometric displacements
Author(s): Cabiati, F.; Giaretto, V.; Miraldi, E.
Author Affiliation: I.E.N.G. Ferraris, Torino, Italy
Journal: Review of Scientific Instruments vol.71, no.4 p.1887-95
Publisher: AIP,
Publication Date: April 2000 Country of Publication: USA
CODEN: RSINAK ISSN: 0034-6748
SICI: 0034-6748(200004)71:4L.1887:CTMT;1-F
Material Identity Number: R017-2000-004
U.S. Copyright Clearance Center Code: 0034-6748/2000/71(4)/1887(9)/$17.00
Language: English
Subfile: A B

...Abstract: triangular prism (the fixed element). Three out-of-balance signals result when the moveable element **moves** from the **zero** position, where each variable capacitance equals the corresponding reference one. The three differences between the...
... is, by choosing one of the three bridge frequencies in sequence one obtains the three **Cartesian** components of the vectorial displacement that the moveable element has undergone. The use of glass...
...Identifiers: **Cartesian** components

14/3,K/2 (Item 2 from file: 2)
DIALOG(R)File 2:INSPEC

06501944 INSPEC Abstract Number: B9703-6310-049
Title: Tracking with state dependent measurement errors
Author(s): Tanner, G.
Author Affiliation: DRA, Farnborough, UK
Conference Title: IEE Colloquium on Target Tracking and Data Fusion (Digest No.1996/253) p.9/1-3
Publisher: IEE, London, UK
Publication Date: 1996 Country of Publication: UK 88 pp.
Material Identity Number: XX97-00030
Conference Title: IEE Colloquium on Target Tracking and Data Fusion (Digest No.1996/253)
Conference Sponsor: IEE
Conference Date: 6-7 Nov. 1996 Conference Location: Malvern, UK
Language: English
Subfile: B

...Abstract: angle measurement errors which depend on the range to the target. The author developed a **Cartesian** extended Kalman filter which takes in to account the state dependence of the measurement errors...
...an inappropriate law in this case, as it attempts to drive the sightline rate to **zero** . **Alternative** laws are shown to give better results.
...Identifiers: **Cartesian** extended Kalman filter

14/3,K/3 (Item 3 from file: 2)
DIALOG(R)File 2:INSPEC

04817160 INSPEC Abstract Number: A91031027

Title: A simple procedure for determining spatial and transient variations of cooling rate within a specimen during cryopreservation. 1. Analysis
Author(s): Diller, K.R.
Author Affiliation: Dept. of Surg., Cambridge Univ., UK
Journal: Proceedings of the Institution of Mechanical Engineers, Part H (Journal of Engineering in Medicine) vol.204, no.H3 p.179-87
Publication Date: 1990 Country of Publication: UK
ISSN: 0954-4119
U.S. Copyright Clearance Center Code: 0954-4119/90/$2.00+.05
Language: English
Subfile: A

...Abstract: liquid state (as in vitrification) or nucleation of ice, followed by thermal equilibration at a **selected** sub- **zero** temperature and subsequent cooling in the solid phase. Both of these processes may be approximated...

... for the cooling rate in a specimen is presented for single-phase heat transfer in **cartesian** , cylindrical and spherical coordinates; extensive tables of the series constants and of the roots of...

14/3,K/4 (Item 4 from file: 2)
DIALOG(R)File 2:INSPEC

04737359 INSPEC Abstract Number: A90135388, B90073297
Title: Efficient numerical formulas for the computation of normal gravity in a Cartesian **frame**
Author(s): Schwarz, K.P.; Wei, M.
Author Affiliation: Dept. of Surveying Eng., Calgary Univ., Alta., Canada
Journal: Manuscripta Geodaetica vol.15, no.4 p.228-34
Publication Date: 1990 Country of Publication: West Germany
CODEN: MANGEH ISSN: 0340-8825
Language: English
Subfile: A B

Title: Efficient numerical formulas for the computation of normal gravity in a Cartesian **frame**
...Abstract: is in principle arbitrary. There are a number of advantages in using an Earth-fixed **Cartesian** frame, specifically the conventional terrestrial frame. In this representation, the normal gravity vector as well as the gravitational vector have three non- **zero** components which **vary** between **zero** and about one Earth gravity. This paper gives a numerical formula for approximating these components...
...Identifiers: **Cartesian** frame

14/3,K/5 (Item 5 from file: 2)
DIALOG(R)File 2:INSPEC

04145557 INSPEC Abstract Number: C88033193
Title: A general pattern classification method for mixed feature problems
Author(s): Ichino, M.
Author Affiliation: Fac. of Sci. & Eng., Tokyo Denki Univ., Saitama, Japan
Journal: Transactions of the Institute of Electronics, Information and Communication Engineers D vol.J71D, no.1 p.92-101
Publication Date: Jan. 1988 Country of Publication: Japan
CODEN: DJTDE2 ISSN: 0374-468X
Language: Japanese
Subfile: C

...Abstract: and qualitative features. As the basic mathematical model

for the method, the author uses the **Cartesian** join system. The feature space is taken as an abstract **Cartesian** product space, and each pattern class is described as a particular bounded region which is generated by the **Cartesian** join operation in the feature space. In the algorithm to generate class regions, the mutual...

... the insight about interclass structures. Then, an efficient feature selection algorithm is realized as a **modified** **zero** -one integer program.
...Identifiers: **Cartesian** join system...

...abstract **Cartesian** product space...

... **Cartesian** join operation...

... **modified** **zero** -one integer program

14/3,K/6 **(Item 6 from file: 2)**
DIALOG(R)File 2:INSPEC

03853783 INSPEC Abstract Number: C87020120
Title: Pattern classification based on the Cartesian **join system: a general tool for feature selection**
Author(s): Ichino, M.
Author Affiliation: Tokyo Denki Univ., Saitama, Japan
Conference Title: Proceedings of the 1986 IEEE International Conference on Systems, Man, and Cybernetics (Cat. No.86CH2364-8) p.1420-4 vol.2
Publisher: IEEE, New York, NY, USA
Publication Date: 1986 Country of Publication: USA 2 vol. 1630 pp.
U.S. Copyright Clearance Center Code: CH2364-8/86/0000-1420$01.00
Conference Sponsor: IEEE
Conference Date: 14-17 Oct. 1986 Conference Location: Atlanta, GA, USA
Language: English
Subfile: C

Title: Pattern classification based on the Cartesian **join system: a general tool for feature selection**
...Abstract: general approach to pattern classification and feature selection for mixed feature problems is presented. The **Cartesian** join system is used as the underlying mathematical model. The feature space is taken as an abstract **Cartesian** product space, and each pattern class is described as a particular bounded region which is generated by the **Cartesian** join operation in the feature space. An efficient feature selection is realized as a **modified** **zero** -one integer program.
Identifiers: **Cartesian** join system...

...abstract **Cartesian** product space...

... **modified** **zero** -one integer program

14/3,K/7 **(Item 7 from file: 2)**
DIALOG(R)File 2:INSPEC

01826783 INSPEC Abstract Number: B75040962
Title: Passive network as a complex-voltage generator in four quadrants
Author(s): Woods, D.
Author Affiliation: Dept. of Chem. Phys., Univ. of Surrey, Guildford, UK
Journal: Proceedings of the Institution of Electrical Engineers vol.122, no.9 p.947-50
Publication Date: Sept. 1975 Country of Publication: UK
CODEN: PIEEAH ISSN: 0020-3270
Language: English

Subfile: B

...Abstract: audio or low radio frequency, it is often necessary to adjust either the polar or **cartesian** components of the voltage in one or more of the channels to establish an initial...

... of a complex voltage in any of the four quadrants with similar control of the **cartesian** components from a **zero** condition. **Alternatively** , if the real and imaginary components of the network's output are fed to a...

14/3,K/8 (Item 8 from file: 2)
DIALOG(R)File 2:INSPEC

01286280 INSPEC Abstract Number: A71046800, B71028909
Title: Computed performance characteristics of electrofluid dynamic colloid generators
Author(s): Minardi, J.E.
Author Affiliation: Univ. Dayton, OH, USA
Journal: Transactions of the ASME. Series A, Journal of Engineering for Power vol.93, no.2 p.183-91
Publication Date: April 1971 Country of Publication: USA
CODEN: JEPOA8 ISSN: 0022-0825
Language: English
Subfile: A B

...Abstract: The study is performed for both an axisymmetric cylinder of charge and a two-dimensional (**Cartesian**) slab of charge between infinite, plane, parallel electrodes. The ratio of radius to length or width to length **varies** from **zero** to infinity, thus both the so- called slender channels and broad channels as well as...
...Identifiers: 2-dimensional **Cartesian** slab of charge...

14/3,K/9 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

05668244 E.I. Monthly No: EI8811102585
Title: CALCULATION OF THE DRAG ON A SPHERE WITH AN ATTACHED DENDRITE.
Author: Hall, M. S.
Corporate Source: Lawrence Livermore Natl Lab, Livermore, CA, USA
Source: Journal of Aerosol Science v 19 n 3 Jun 1988 p 317-331
Publication Year: 1988
CODEN: JALSB7 ISSN: 0021-8502
Language: English

...Abstract: inherent in the method is done by first considering two detached spheres, both stationary and **moving** with non- **zero** relative velocities. Flow fields are calculated for several representative multi-particle dendrites, and a drag...
Identifiers: FIBROUS AIR FILTRATION; ATTACHED DENDRITE EFFECT; **CARTESIAN** COORDINATES; FILTER CLOGGING; STOKES EQUATIONS; DRAG ON A SPHERE CALCULATION

14/3,K/10 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

02451279 Genuine Article#: LC132 No. References: 22
Title: AUTOMATIC-GENERATION AND NUMERICAL-INTEGRATION OF DIFFERENTIAL-ALGEBRAIC EQUATIONS OF MULTIBODY DYNAMICS
Author(s): YEN J; CHOU CC

Corporate Source: COMP AIDED DESIGN SOFTWARE INC,POB 203/OAKDALE//IA/52319;
UNIV IOWA,DEPT COMP SCI/IOWA CITY//IA/52242
Journal: COMPUTER METHODS IN APPLIED MECHANICS AND ENGINEERING, 1993, V104
, N3 (MAY), P317-331
ISSN: 0045-7825
Language: ENGLISH Document Type: ARTICLE (Abstract Available)

...Abstract: numerical integration method of constrained equations of motion in multibody mechanical system dynamics is presented. **Cartesian** coordinates and Euler parameters have been used as the state variables to construct the mathematical...
...Research Fronts: DIFFERENTIAL-ALGEBRAIC EQUATIONS FOR CONSTRAINED MECHANICAL MOTION)
91-0651 001 (DIFFERENTIAL-ALGEBRAIC EQUATIONS; LINEAR TIME- **VARYING** DESCRIPTOR SYSTEMS; **ZERO** -ORDER CAUSAL PATHS; NONLINEAR CONSOLIDATION; BOND GRAPH APPROACH)

14/3,K/11 (Item 1 from file: 144)
DIALOG(R)File 144:Pascal

00017832 PASCAL No.: 73-0001062
EN BULGARE
(INFLUENCE DU MOUVEMENT DU POLE SUR LES COORDONNEES EQUATORIALES ET RECTANGULAIRES)
DASKALOVA M
Journal: IZVEST. CENTR. LAB. GEOD., SOFIJA, 1971, 12 85-93
Language: BULGARIAN Summary Language: RUSSIAN; GERMAN

English Descriptors: TRANSFORMATION OF COORDINATES; **CARTESIAN** COORDINATE; POLAR MOTION

French Descriptors: COORDONNEE CARTESIENNE; COORDONNEE EQUATORIALE; **CHANGEMENT** COORDONNEE; MOUVEMENT **POLE** ; ASTRONOMIE GEODESIQUE POSITION

Spanish Descriptors: CAMBIO COORDENADAS; COORDENADAS **CARTESIANAS** ; MOVIMIENTO POLO

14/3,K/12 (Item 1 from file: 239)
DIALOG(R)File 239:Mathsci

02378623 MR 93g#05141
A linear Ramsey theorem.
Feldman, David (Department of Mathematics, University of New Hampshire, Durham, New Hampshire, 03824)
Propp, James (Department of Mathematics, Massachusetts Institute of Technology, Cambridge, Massachusetts, 02139)
(Feldman, David Victor)
Corporate Source Codes: 1-NH; 1-MIT
Adv. Math.
Advances in Mathematics, 1992, 95, no. 1, 1--7. ISSN: 0001-8708
CODEN: ADMTA4
Language: English Summary Language: English
Subfile: MR (Mathematical Reviews) AMS
Abstract Length: MEDIUM (15 lines)
Reviewer: Graver, J. E. (1-SRCS)

...vector spaces over the field K and let $V\sp k$ denote the kth **Cartesian** power of V; the elements of $V\sp k$ are called multivectors. A mapping $L...

...k\to U$ is multilinear if it is linear in each variable and it is

16/3,K/1 (Item 1 from file: 2)
DIALOG(R)File 2:INSPEC

08604652 INSPEC Abstract Number: B2003-06-1250-005
Title: A 150/400/800/1900 MHz low noise Cartesian **feedback IC with programmable loop bandwidth**
Author(s): **Gailus, P.** ; Charaska, J.
Author Affiliation: Commercial, Gov., & Ind. Solutions Sector, Motorola Inc., Schaumburg, IL, USA
Conference Title: ESSCIRC 2002. Proceedings of the 28th European Solid-State Circuit Conference p.171-4
Editor(s): Baschirotto, A.; Malcovati, P.
Publisher: Univ. Bologna, Bologna, Italy
Publication Date: 2002 Country of Publication: Italy xvii+846 pp.
ISBN: 88 900847 9 0 Material Identity Number: XX-2003-00077
Conference Title: ESSCIRC 2002. Proceedings of the 28th European Solid-State Circuit Conference
Conference Date: 24-26 Sept. 2002 Conference Location: Firenze, Italy
Language: English
Subfile: B

Title: A 150/400/800/1900 MHz low noise Cartesian **feedback IC with programmable loop bandwidth**
Author(s): **Gailus, P.** ; Charaska, J.
Abstract: A direct conversion, quadruple-band, programmable bandwidth **Cartesian** feedback linearization IC with flexibility to support multiple linear transmitter applications is presented. Operation at...
Identifiers: low-noise **Cartesian** feedback linearization IC...

16/3,K/2 (Item 1 from file: 95)
DIALOG(R)File 95:TEME-Technology & Management

01790235 20030603567
A 150/400/800/1900 MHz low noise cartesian **feedback IC with programmable loop bandwith**
(Ein rauscharmer lokaler Oszillator fuer 150, 400, 800 und 1900 MHz mit programmierbarer Bandbreite)
Gailus, P ; Charaska, J
Motorola, Schaumburg, D
ESSCIRC 2002, 28th Europ. Solid-State Circuits Conf., Proc., Firenze, I, Sep 24-26, 20022002
Document type: Conference paper Language: English
Record type: Abstract
ISBN: 88-900847-9-0

A 150/400/800/1900 MHz low noise cartesian **feedback IC with programmable loop bandwith**
Gailus, P ; Charaska, J

ABSTRACT:
A direct conversion, quadruple-band, programmable bandwidth **Cartesian** feedback linearization IC with flexibility to support multiple linear transmitter applications is presented. Operation at...
?

```
File   9:Business & Industry(R) Jul/1994-2007/Jun 15
         (c) 2007  The Gale Group
File  15:ABI/Inform(R) 1971-2007/Jun 19
         (c) 2007 ProQuest Info&Learning
File  16:Gale Group PROMT(R) 1990-2007/Jun 15
         (c) 2007 The Gale Group
File  20:Dialog Global Reporter 1997-2007/Jun 20
         (c) 2007 Dialog
File  47:Gale Group Magazine DB(TM) 1959-2007/Jun 07
         (c) 2007 The Gale group
File  75:TGG Management Contents(R) 86-2007/Jun W2
         (c) 2007 The Gale Group
File  80:TGG Aerospace/Def.Mkts(R) 1982-2007/Jun 15
         (c) 2007 The Gale Group
File  88:Gale Group Business A.R.T.S. 1976-2007/Jun 13
         (c) 2007 The Gale Group
File  98:General Sci Abs 1984-2007/Jun
         (c) 2007 The HW Wilson Co.
File 112:UBM Industry News 1998-2004/Jan 27
         (c) 2004 United Business Media
File 141:Readers Guide 1983-2007/Apr
         (c) 2007 The HW Wilson Co
File 160:Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
File 275:Gale Group Computer DB(TM) 1983-2007/Jun 15
         (c) 2007 The Gale Group
File 264:DIALOG Defense Newsletters 1989-2007/Jun 18
         (c) 2007 Dialog
File 484:Periodical Abs Plustext 1986-2007/Jun W2
         (c) 2007 ProQuest
File 553:Wilson Bus. Abs. 1982-2007/Jun
         (c) 2007 The HW Wilson Co
File 570:Gale Group MARS(R) 1984-2007/Jun 15
         (c) 2007 The Gale Group
File 608:KR/T Bus.News. 1992-2007/Jun 20
         (c)2007 Knight Ridder/Tribune Bus News
File 620:EIU:Viewswire 2007/Jun 19
         (c) 2007 Economist Intelligence Unit
File 613:PR Newswire 1999-2007/Jun 19
         (c) 2007 PR Newswire Association Inc
File 621:Gale Group New Prod.Annou.(R) 1985-2007/Jun 15
         (c) 2007 The Gale Group
File 623:Business Week 1985-2007/Jun 19
         (c) 2007 The McGraw-Hill Companies Inc
File 624:McGraw-Hill Publications 1985-2007/Jun 06
         (c) 2007 McGraw-Hill Co. Inc
File 635:Business Dateline(R) 1985-2007/Jun 19
         (c) 2007 ProQuest Info&Learning
File 636:Gale Group Newsletter DB(TM) 1987-2007/Jun 15
         (c) 2007 The Gale Group
File 647:CMP  Computer Fulltext 1988-2007/Sep W1
         (c) 2007 CMP Media, LLC
File 696:DIALOG Telecom. Newsletters 1995-2007/Jun 19
         (c) 2007 Dialog
File 674:Computer News Fulltext 1989-2006/Sep W1
         (c) 2006 IDG Communications
File 810:Business Wire 1986-1999/Feb 28
         (c) 1999 Business Wire
File 813:PR Newswire 1987-1999/Apr 30
         (c) 1999 PR Newswire Association Inc

Set     Items   Description
S1      20296   (FEEDBACK OR FEED()BACK)(3N)(LOOP?? OR PATH OR PATHS)
S2          3   CARTESIAN()(FEEDBACK OR FEED()BACK)()LOOP??
S3    1441457   ZERO?? OR POLE??
```

```
S4       26252   S3(3N)(ADJUST? OR ALTER? OR MODIF? OR CHANG?  OR SELECT? OR
                 PICK OR PICKS OR PICKING OR MOVE OR MOVES OR MOVING OR VARY?-
                 ?? OR VARIES)
S5         240   AU=(GAILUS, P? OR GAILUS P? OR GABATO, M? OR GABATO M? OR -
                 MCCALLUM, K? OR MCCALLUM K? OR WILHITE, J? OR WILHITE J? OR P-
                 AUL(2N)GAILUS OR MANUEL(2N)GABATO OR KEVIN(2N)MCCALLUM OR JEF-
                 FREY(2N)WILHITE)
S6           5   S1(3N)S4
S7           2   RD  (unique items)
S8           0   S2(3N)S4
S9           3   S2(3N)CARTESIAN?
S10          3   RD  (unique items)
S11          3   S10 NOT S7
?
```

7/3,K/1 (Item 1 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)

11428471 Supplier Number: 121399639 (USE FORMAT 7 FOR FULLTEXT)
Alliance Semiconductor Expands Mixed Signal Family to Include the Industry's Most Comprehensive Line of Zero Delay Buffers.
Business Wire, pNA
August 30, 2004
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 771

.... loop (PLL), input and output dividers configured from four to eight outputs and an external **feedback path** for the **Zero** Delay **Adjustment** . They also provide low power, low propagation delay and output skews, and improved waveform integrity...

7/3,K/2 (Item 1 from file: 47)
DIALOG(R)File 47:Gale Group Magazine DB(TM)

07306718 SUPPLIER NUMBER: 144936670 (USE FORMAT 7 OR 9 FOR FULL TEXT)
GUIs: A Sticky Issue in Digital Power Design.
Power Electronics Technology, 32, 4, NA
April 1, 2006
ISSN: 1523-4908 LANGUAGE: English RECORD TYPE: Fulltext
WORD COUNT: 708 LINE COUNT: 00058

... would translate from S to Z domains. For example, in the GUIs provided, users could **change** settings for **poles** and **zeros** to **modify feedback loop** compensation, and then simulate transient response.
The Z transforms discussion underscores the apprehension in the...
?

11/3,K/1 (Item 1 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

03142073 SUPPLIER NUMBER: 150362704 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Cartesian loop chip feeds linear RF power amplifier.
Biancomano, Vincent
Electronic Engineering Times, 1438, 62
August 28, 2006
ISSN: 0192-1541 LANGUAGE: English RECORD TYPE: Fulltext
WORD COUNT: 313 LINE COUNT: 00028

Winston-Salem, N.C. - CML Microcircuit's CMX998 **Cartesian Feedback Loop** Transmitter IC is designed to provide manufacturers of two-way wireless systems with a practical...

11/3,K/2 (Item 2 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

01548232 SUPPLIER NUMBER: 12926086 (USE FORMAT 7 OR 9 FOR FULL TEXT)
British mobile-radio specification narrows channel width down to 5 kHz. (Specification MPT-1376)
Fletcher, Peter
Electronic Design, v40, n22, p34(1)
Nov 2, 1992
ISSN: 0013-4872 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 685 LINE COUNT: 00055

...ABSTRACT: and the DSPs will make appropriate adjustments, if there are signs of deterioration, using a **Cartesian feedback loop** , which will correct audio- or data-signal distortion.
... signs of deterioration, digital-signal processors in the transceivers will make appropriate adjustments using a **Cartesian feedback loop** to correct audio- or data-signal distortion. This allows for feedforward signal regeneration (FFSR), which...

11/3,K/3 (Item 1 from file: 647)
DIALOG(R)File 647:CMP Computer Fulltext

01298026 CMP ACCESSION NUMBER: EET20060828S0047
Cartesian loop chip feeds linear RF power amplifier
Vincent Biancomano
ELECTRONIC ENGINEERING TIMES, 2006, n 1438, PG62
PUBLICATION DATE: 060828
JOURNAL CODE: EET LANGUAGE: English
RECORD TYPE: Fulltext
SECTION HEADING: eeProduct Center
WORD COUNT: 291

TEXT:

Winston-Salem, N.C. - CML Microcircuit's CMX998 **Cartesian Feedback Loop** Transmitter IC is designed to provide manufacturers of two-way wireless systems with a practical...
?

```
File 324:German Patents Fulltext 1967-200723
         (c) 2007 Univentio
File 348:EUROPEAN PATENTS 1978-2007/ 200724
         (c) 2007 European Patent Office
File 349:PCT FULLTEXT 1979-2007/UB=20070614UT=20070607
         (c) 2007 WIPO/Thomson

Set     Items   Description
S1      33383   (FEEDBACK OR FEED()BACK)(3N)(LOOP?? OR PATH OR PATHS)
S2         44   CARTESIAN()(FEEDBACK OR FEED()BACK)()LOOP??
S3     601249   ZERO?? OR POLE??
S4      51894   S3(3N)(ADJUST? OR ALTER? OR MODIF? OR CHANG?  OR SELECT? OR
              PICK OR PICKS OR PICKING OR MOVE OR MOVES OR MOVING OR VARY?-
              ?? OR VARIES)
S5         53   AU=(GAILUS, P? OR GAILUS P? OR GABATO, M? OR GABATO M? OR -
              MCCALLUM, K? OR MCCALLUM K? OR WILHITE, J? OR WILHITE J? OR P-
              AUL(2N)GAILUS OR MANUEL(2N)GABATO OR KEVIN(2N)MCCALLUM OR JEF-
              FREY(2N)WILHITE)
S6         16   S1(3N)S4
S7          2   S6 AND IC=H04B?
S8          0   S2(3N)S4
S9         44   S2(3N)CARTESIAN?
S10        14   S9 AND IC=H04B?
S11        14   S10 NOT S7
S12         0   S5(3N)(S1 OR S2)
?
```

7/3,K/1 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00892348 **Image available**
CALIBRATION OF A TRANSMIT BRANCH AND/OR A RECEIVE BRANCH OF A QUADRATURE TRANSMITTER AND/OR TRANSCEIVER
CALIBRAGE D'UNE BRANCHE DE TRANSMISSION ET/OU D'UNE BRANCHE DE RECEPTION D'UN EMETTEUR EN QUADRATURE ET/OU D'UN EMETTEUR-RECEPTEUR
Patent Applicant/Assignee:
KONINKLIJKE PHILIPS ELECTRONICS N V, Groenewoudseweg 1, NL-5621 BA Eindhoven, NL, NL (Residence), NL (Nationality)
Inventor(s):
MOHINDRA Rishi, Prof. Holstlaan 6, NL-5656 AA Eindhoven, NL,
Legal Representative:
VOLMER Georg (agent), INTERNATIONAAL OCTROOIBUREAU B.V., Prof. Holstlaan 6, NL-5656 AA Eindhoven, NL,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200225846 A2-A3 20020328 (WO 0225846)
Application: WO 2001EP10312 20010906 (PCT/WO EP0110312)
Priority Application: US 2000665925 20000920
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
CN JP KR
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
Publication Language: English
Filing Language: English
Fulltext Word Count: 3876

Main International Patent Class (v7): **H04B-017/00**
International Patent Class (v7): **H04B-001/40** ...
Fulltext Availability:
Detailed Description

Detailed Description
... down converters. The DC offset is measured at inputs of the up-converters when the **feedback** around a linearization **loop** is reduced to **zero** without **altering** the dc; offsets produced at the outputs of the frequency 1 5 down-converters. Subtractors...

7/3,K/2 (Item 2 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00375237 **Image available**
TRANSMITTER COMPRISING CARRIER SUPPRESSION AND DC OFFSET REDUCTION MEANS
EMETTEUR A SUPPRESSION DE PORTEUSES ET REDUCTION DU DECALAGE DU NIVEAU CONTINU
Patent Applicant/Assignee:
PHILIPS ELECTRONICS N V,
PHILIPS NORDEN AB,
Inventor(s):
WILSON John F,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9715980 A1 19970501
Application: WO 96IB1132 19961022 (PCT/WO IB9601132)
Priority Application: GB 9521769 19951024
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
JP AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Fulltext Word Count: 5105

International Patent Class (v7): **H04B-01:02** ...
Fulltext Availability:
Detailed Description

English Abstract
...offsets at the respective inputs of the frequency up-converting means (28, 30) when the **feedback** around the linearisation **loop** is reduced to **zero** without **altering** the dc offsets produced at the outputs of the frequency down-converting means (56, 58...

Detailed Description
... the nulling process, for example by opening the switch 76 and in so doing the **feedback** around the **loop** is reduced to **zero** without
altering the dc offsets produced at the down-conversion mixer outputs. This process ensures that any...
?

11/3,K/1 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

01750229
Wireless communication unit and transmitter circuit therefor
Drahtlose Kommunikationseinheit und zugehorige Senderschaltung
Unite de communication sans fils et circuit transmetteur y relatif
PATENT ASSIGNEE:
Motorola Inc., (3334189), Intellectual Property Department, 1303 East Algonquin Road, Schaumburg, IL 60196, (US), (Applicant designated States: all)
INVENTOR:
Aronas, Alik, Motorola Israel Limited, 3 Kremenetsky Street, 67899 Tel Aviv, (IL)
Blay, Genadi, Motorola Israel Limited, 3 Kremenetsky Street, 67899 Tel Aviv, (IL)
Kodner, Leonid, Motorola Israel Limited, 3 Kremenetsky Street, 67899 Tel Aviv, (IL)
LEGAL REPRESENTATIVE:
McCormack, Derek James et al (48159), Optimus, Grove House, Lutyens Close, Chineham Court, Basingstoke, Hampshire RG24 8AG, (GB)
PATENT (CC, No, Kind, Date): EP 1432132 A1 040623 (Basic)
APPLICATION (CC, No, Date): EP 2003104101 031106;
PRIORITY (CC, No, Date): GB 229798 021220
DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LI; LU; MC; NL; PT; RO; SE; SI; SK; TR
EXTENDED DESIGNATED STATES: AL; LT; LV; MK
INTERNATIONAL PATENT CLASS (V7): **H04B-001/04** ; H03F-001/32
ABSTRACT WORD COUNT: 125
NOTE:
Figure number on first page: 2

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200426	266
SPEC A	(English)	200426	3515
Total word count - document A			3781
Total word count - document B			0
Total word count - documents A + B			3781

INTERNATIONAL PATENT CLASS (V7): **H04B-001/04** ...

...SPECIFICATION Modulation" by M Johansson and T Mattsson 1991 IEEE.
In summary, the operation of a **Cartesian feedback loop** can be defined as follows. Let us define:
x = input signal;
y = output signal;
(epsilon...

...and eventually output as a RF signal by the power amplifier 124. A real-time **Cartesian feedback loop** , via the feedback path 140 and the down-converter 132, ensures a linearised output signal...

...the preferred embodiment of the present invention, the isolator is included as part of the **Cartesian feedback loop** . In this regard, it is now located prior to the directional coupler 240. Thus, the...

...together with the lineariser circuitry 222 power amplifier 224 and isolator 226 a real-time **Cartesian feedback loop** to ensure a linear, stable transmitter output. The directional coupler 240, which has a high...

11/3,K/2 (Item 2 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

01718824
wireless communication unit and integrated circuit for use therein
Drahtloses Nachrichtengerat und integrierte Schaltung zum Gebrauch darin
Unite de communications sans fil et circuit integre pour cette unite de communications
PATENT ASSIGNEE:
MOTOROLA, INC., (205770), 1303 East Algonquin Road, Schaumburg, IL 60196, (US), (Applicant designated States: all)
INVENTOR:
GROSSMAN, Ovadia, Motorola Israel Limited 3 Kremenetsky Street, 67899, Tel Aviv, (IL)
BEN-AYUN, Moshe, Hayasmin 27, 67990, Shoham, (IL)
ROZENTAL, Mark, Motorola Israel Limited 3 Kremenetsky Street, 67899, Tel Aviv, (IL)
LEGAL REPRESENTATIVE:
McCormack, Derek James et al (48159), Optimus, Grove House, Lutyens Close, Chineham Court, Basingstoke, Hampshire RG24 8AG, (GB)
PATENT (CC, No, Kind, Date): EP 1408619 A2 040414 (Basic)
APPLICATION (CC, No, Date): EP 2003103733 031008;
PRIORITY (CC, No, Date): GB 223538 021010
DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LI; LU; MC; NL; PT; RO; SE; SI; SK; TR
EXTENDED DESIGNATED STATES: AL; LT; LV; MK
INTERNATIONAL PATENT CLASS (V7): **H04B-001/44** ; **H04B-001/38**
ABSTRACT WORD COUNT: 170
NOTE:
Figure number on first page: 3

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200416	513
SPEC A	(English)	200416	3396
Total word count - document A			3909
Total word count - document B			0
Total word count - documents A + B			3909

INTERNATIONAL PATENT CLASS (V7): **H04B-001/44** ...

... **H04B-001/38**

...SPECIFICATION and eventually output as a RF signal by the power amplifier 124. A real-time **Cartesian feedback loop** , via the feedback path 140 and the down-converter 132, ensures a linearised output signal...

...a down-converter 232, which forms together with the lineariser circuitry 222 a real-time **Cartesian feedback loop** to ensure a linear, stable transmitter output.
Referring now to FIG. 3, a block diagram...

11/3,K/3 (Item 3 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00509661
FAST PHASE SHIFT ADJUSTING METHOD AND DEVICE FOR LINEAR TRANSMITTER
VERFAHREN UND VORRICHTUNG ZUR KORREKTUR DER PHASENDIFFERENZ EINES LINEAREN SENDERS
METHODE ET DISPOSITIF DE REGLAGE DE DEPHASAGE RAPIDE POUR UN EMETTEUR

LINEAIRE
PATENT ASSIGNEE:
MOTOROLA, INC., (205770), 1303 East Algonquin Road, Schaumburg, IL 60196, (US), (Proprietor designated states: all)
INVENTOR:
GAILUS, Paul, Howe, 500 Crego Court, Prospect Heights, IL 60070, (US)
LEGAL REPRESENTATIVE:
Dunlop, Hugh Christopher et al (59551), Motorola, European Intellectual Property Operations Midpoint Alencon Link, Basingstoke, Hampshire RG21 7PL, (GB)
PATENT (CC, No, Kind, Date): EP 506908 A1 921007 (Basic)
EP 506908 A1 941012
EP 506908 B1 000531
WO 9208291 920514
APPLICATION (CC, No, Date): EP 91918022 910920; WO 91US6789 910920
PRIORITY (CC, No, Date): US 607423 901031
DESIGNATED STATES: DE; FR; GB
INTERNATIONAL PATENT CLASS (V7): **H04B-001/04** ; H03C-003/08
NOTE:
No A-document published by EPO
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200022	852
CLAIMS B	(German)	200022	795
CLAIMS B	(French)	200022	1004
SPEC B	(English)	200022	3682
Total word count - document A			0
Total word count - document B			6333
Total word count - documents A + B			6333

INTERNATIONAL PATENT CLASS (V7): **H04B-001/04** ...

...SPECIFICATION vector is at this time substantially reduced, allowing closure of the at least one open **cartesian feedback loop** with minimal splatter or off channel energy, and providing a time-efficient phase correction.
FIG...

11/3,K/4 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

01391737 **Image available**
POWER MANAGEMENT OF A TRANSMITTER AND SUPPORTING METHODS AND APPARATUS
GESTION DE LA PUISSANCE D'UN EMETTEUR ET PROCEDES ET APPAREIL DE PRISE EN CHARGE
Patent Applicant/Assignee:
MOTOROLA INC, 1303 East Algonquin Road, Schaumburg, IL 60196, US, US (Residence), US (Nationality), (For all designated states except: US)
Patent Applicant/Inventor:
LEIZEROVICH Gustavo D, 20450 N.E. 34th Court, Aventura, FL 33180, US, US (Residence), US (Nationality),
BOZEKI John J, 319 Brittany Trail, Elgin, IL 60120, US, US (Residence), US (Nationality),
COFFEE Clarence K, 522 S.W. 176th Way, Pembroke Pines, FL 33029, US, US (Residence), US (Nationality),
DOREVITCH Josh E, 2751 W. Greenleaf, Chicago, IL 60645, US, US (Residence), US (Nationality),
GAILUS Paul H, 500 Grego Court, Prospect Heights, IL 60070, US, US (Residence), US (Nationality),
KIRSCHENMANN Mark A, 2231 West Harrison Street, Chandler, AZ 85224, US, US (Residence), US (Nationality),
Legal Representative:

GARRETT Scott M et al (agent), 8000 West Sunrise Boulevard, Room 1610, Plantation, FL 33322, US
Patent and Priority Information (Country, Number, Date):
Patent: WO 200673623 A2-A3 20060713 (WO 0673623)
Application: WO 2005US43169 20051130 (PCT/WO US2005043169)
Priority Application: US 200426945 20041230
Designated States:
(All protection types applied unless otherwise stated - for applications 2004+)
AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KM KN KP KR KZ LC LK LR LS LT LU LV LY MA MD MG MK MN MW MX MZ NA NG NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SM SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LT LU LV MC NL PL PT RO SE SI SK TR
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
(AP) BW GH GM KE LS MW MZ NA SD SL SZ TZ UG ZM ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 4077
International Patent Class (v8 + Attributes)
IPC + Level Value Position Status Version Action Source Office:
...US
H04B-0001/04 ...
Fulltext Availability:
Detailed Description

Detailed Description
... level of compression, typically 2dB. This is done by driving a linear ramp into the **Cartesian feedback loop** and monitoring the loop error signal. When the error signal exceeds a certain threshold, the...

...voltage sum-signal 40. The loop filter and amplifier 68 sets the stability of the **Cartesian Feedback loop** .

[0019] The output signal 70 from the loop filter and amplifier 68 is forwarded to...

...78 provides the adequate phase difference between upmixing and down-mixing functions to maintain adequate **Cartesian Feedback loop** stable operation. As typically done in a Cartesian feedback transmitter, the down mixer 80 downconverts...

...RFPA output 82. The downconverted signal 84 is fed to the summation circuit.
[00201 The **Cartesian feedback loop** described is commonly known in the art. Unlike the prior art, however, the resultant transmitter...

11/3,K/5 (Item 2 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

01254851 **Image available**
WIRELESS COMMUNICATION SYSTEM USING A PLURALITY OF ANTENNA ELEMENTS WITH ADAPTIVE WEIGHTING AND COMBINING TECHNIQUES
SYSTEME DE COMMUNICATIONS SANS FIL UTILISANT UNE PLURALITE D'ELEMENTS D'ANTENNE ET DES TECHNIQUES DE PONDERATION ET DE COMBINAISON ADAPTIVES
Patent Applicant/Assignee:
MOTIA INC, 2700 East Foothill Blvd., Suite 201, Pasadena, CA 91107, US, US (Residence), US (Nationality), (For all designated states except: US)
Inventor(s):

WANG James June-Ming, 1473 Waverly Road, San Marino, CA 91108, US, (Designated for all)
WINTERS Jack, 103 Old Wagon Road, Middletown, NJ 07748, US, (Designated for all)
DOONG Meng Chang, 1001 N. Stoneman Avenue, #D, Alhambra, CA 91801, US, (Designated for all)
YANG Chau Chin, 1841 South Westgate Avenue, Los Angeles, CA 90025, US, (Designated for all)
Legal Representative:
DUNN MCKAY Diane (agent), Mathews, Collins, Shepherd & McKay, P.A., 100 Thanet Circle,, Suite 306, Princeton, NJ 08540, US
Patent and Priority Information (Country, Number, Date):
Patent: WO 200560574 A2-A3 20050707 (WO 0560574)
Application: WO 2004US40716 20041206 (PCT/WO US2004040716)
Priority Application: US 2003732003 20031210
Designated States:
(All protection types applied unless otherwise stated - for applications 2004+)
AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LT LU MC NL PL PT RO SE SI SK TR
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
(AP) BW GH GM KE LS MW MZ NA SD SL SZ TZ UG ZM ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 11982

International Patent Class (v8 + Attributes)
IPC + Level Value Position Status Version Action Source Office:
H04B-0007/08 ...

...US
H04B-0017/02 ...
Fulltext Availability:
Detailed Description

Detailed Description
... to-noise ratio in each individual channel.

MRC beam forming module 30 can employ a **Cartesian feedback loop** , as shown in Fig. 3. MRC beam forming module 30 provides baseband processing which performs...

11/3,K/6 (Item 3 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2007 WIPO/Thomson. All rts. reserv.

01139408 **Image available**
MULTIPLE MODE TRANSMITTER
EMETTEUR A MODE MULTIPLE
Patent Applicant/Assignee:
MOTOROLA INC, 1303 East Algonquin Road, Schaumburg, IL 60196, US, US (Residence), US (Nationality)
Inventor(s):
LEIZEROVICH Gustavo, 20450 N.E. 34th Court, Aventura, FL 33180, US,
Legal Representative:
GARRETT Scott M (et al) (agent), 8000 West Sunrise Boulevard, Room 1610, Plantation, FL 33322, US,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200462145 A2-A3 20040722 (WO 0462145)

Application: WO 2003US39085 20031210 (PCT/WO US03039085)
Priority Application: US 2002331837 20021230
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE SI SK TR
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
(AP) BW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 2450

Main International Patent Class (v7): **H04B-001/04**
Fulltext Availability:
Detailed Description

Detailed Description

... in such devices, linearization techniques can be employed in a power amplifier such as a **Cartesian feedback loop** .

A **Cartesian feedback loop** is a closed loop negative feedback technique which sums
I
the baseband feedback signal to...
...systems and methods described above provide for a training method for an RFPA in a **Cartesian feedback loop** where the supply modulator is locked to a fixed DC voltage during training. This training...

...linear operation of the transmitter 100. Although, the present example of FIG. I illustrates a **Cartesian feedback loop** , other feedback loops may be employed, such as IF feedback and RF feedback loops. It...

11/3,K/7 (Item 4 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

01128359 **Image available**
WIRELESS SUBSCRIBER COMMUNICATION UNIT AND ANTENNA ARRANGEMENT THEREFOR
UNITE DE COMMUNICATION SANS FIL D'ABONNE ET AGENCEMENT D'ANTENNE ASSOCIE
Patent Applicant/Assignee:
MOTOROLA INC, 1303 E.Algonquin Road, Schaumburg 60196, US, US (Residence) , US (Nationality), (For all designated states except: US)
MOTOROLA LIMITED, Jays Close, Viables Industrial Estate, Basingstoke RG22 4PD, GB, GB (Residence), GB (Nationality), (Designated only for: GB)
Patent Applicant/Inventor:
GROSSMAN Ovadia, Motorola Israel Limited, 3 Kremenetsky Street, 67899 Tel Aviv, IL, IL (Residence), IL (Nationality), (Designated only for: US)
BEN-AYUN Moshe, Motorola Israel Limited, 3 Kremenetsky Street, 67899 Tel Aviv, IL, IL (Residence), IL (Nationality), (Designated only for: US)
ROZENTAL Mark, Motorola Israel Limited, 3 Kremenetsky Street, 67899 Tel Aviv, IL, IL (Residence), IL (Nationality), (Designated only for: US)
Legal Representative:
MCCORMACK Derek J (agent), Motorola European Intellectual Property Operations, Midpoint, Alencon Link, Basingstoke RG21 7PL, GB,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200451878 A1 20040617 (WO 0451878)
Application: WO 2003EP50735 20031020 (PCT/WO EP03050735)

Priority Application: GB 200227929 20021129
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE SI SK TR
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 7475

Main International Patent Class (v7): **H04B-001/38**
International Patent Class (v7): **H04B-007/06**
Fulltext Availability:
Detailed Description
Detailed Description
... and eventually
output as a RF signal by the power amplifier 124. A real-time **Cartesian feedback loop** , via the feedback path 140 and the down-converter 132, ensures a linearised output signal...

...a down
converter 232, which forms together with the lineariser circuitry 222 a real-time **Cartesian feedback loop** to ensure a linear, stable transmitter output.

In accordance with an embodiment of the present...

11/3,K/8 (Item 5 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00865660 **Image available**
A RADIO FREQUENCY (RF) TRANSCEIVER
EMETTEUR-RECEPTEUR A FREQUENCES RADIO (RF)
Patent Applicant/Assignee:
CENTRAL RESEARCH LABORATORIES LIMITED, Dawley Road, Hayes, Middlesex UB3 1HH, GB, GB (Residence), GB (Nationality), (For all designated states except: US)
Patent Applicant/Inventor:
LOVERIDGE Adam, 5 Gilbert Scott Court, Towcester, Northants NN12 6DX, GB, GB (Residence), GB (Nationality), (Designated only for: US)
Legal Representative:
LEAMAN Keith (agent), QED I.P. Services Limited, Dawley Road, Hayes, Middlesex UB3 1HH, GB,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200199298 A1 20011227 (WO 0199298)
Application: WO 2001GB2751 20010620 (PCT/WO GB0102751)
Priority Application: GB 200015223 20000621
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
US
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
Publication Language: English
Filing Language: English
Fulltext Word Count: 1798

Main International Patent Class (v7): **H04B-001/44**
Fulltext Availability:
Detailed Description

Detailed Description
... A- 6 043 712 (MOTOROLA). There is described a linear power amplifier for use in **Cartesian feedback loops** . The amplifier reduces current drain in low voltage linear amplifiers which, for example, are used...

11/3,K/9 (Item 6 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00830191 **Image available**
APPARATUS FOR LINEAR TRANSMITTER WITH IMPROVED LOOP GAIN STABILIZATION
DISPOSITIF DESTINE A UN EMETTEUR LINEAIRE DOTE DE STABILISATION AMELIOREE DE GAIN EN BOUCLE
Patent Applicant/Assignee:
MOTOROLA ISRAEL LIMITED, Kremenetski Street 16, 67899 Tel Aviv, IL, IL (Residence), IL (Nationality), (For all designated states except: US)
Patent Applicant/Inventor:
BEN-AYUN Moshe, 27 Hayasmin, Street, P.O.Box 3026, 73142, Shoham, IL, IL (Residence), IL (Nationality), (Designated only for: US)
ROZENTAL Mark, Apartment 8, Herzel Street 29, 76560 Rehovot, IL, IL (Residence), IL (Nationality), (Designated only for: US)
Patent and Priority Information (Country, Number, Date):
Patent: WO 200163792 A2-A3 20010830 (WO 0163792)
Application: WO 2001IB254 20010226 (PCT/WO IB0100254)
Priority Application: GB 20004557 20000225
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
AL AM AU AZ BA BB BG BR BY CA CH CN CU CZ EE GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LV MD MG MK MN MW MX NO NZ PL RO RU SD SG SI SK SL TJ TM TT UA UG US UZ VN YU ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
Publication Language: English
Filing Language: English
Fulltext Word Count: 3202

Main International Patent Class (v7): **H04B-001/04**
Fulltext Availability:
Detailed Description

Detailed Description
... loop 78 is a closed loop amplifier structure. Typically, this structure can be considered a **Cartesian feedback loop** amplifier. The input signal 80 is generally a complex digital baseband signal, having quadrature components...178 is a closed loop amplifier structure.

Typical 'Y7 this structure can be considered a **Cartesian feedback loop** amplifier. The input signal 180 is generally a complex digital baseband signal having quadrature components...

11/3,K/10 (Item 7 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2007 WIPO/Thomson. All rts. reserv.

00813473 **Image available**
METHOD AND APPARATUS FOR LINEAR AMPLIFICATION OF A RADIO FREQUENCY SIGNAL
PROCEDE ET APPAREIL D'AMPLIFICATION LINEAIRE D'UN SIGNAL DE RADIOFREQUENCE
Patent Applicant/Assignee:

MOTOROLA INC, 1303 East Algonquin Road, Schaumburg, IL 60196, US, US (Residence), US (Nationality)
Inventor(s):
GAILUS Paul H, 500 Grego Court, Prospect Heights, IL 60070, US,
TURNEY William J, 1426 Chatham Lane, Schaumburg, IL 60193, US,
Legal Representative:
JACOBS Jeffrey K (et al) (agent), Motorola Inc., Intellectual Property Dept., 1303 East Algonquin Road, Schaumburg, IL 60196, US,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200147127 A1 20010628 (WO 0147127)
Application: WO 2000US30336 20001102 (PCT/WO US0030336)
Priority Application: US 99468025 19991220
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
BR CA
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
Publication Language: English
Filing Language: English
Fulltext Word Count: 13141

Main International Patent Class (v7): **H04B-001/04**
Fulltext Availability:
Detailed Description

Detailed Description
... To overcome the deficiencies of an open loop EER system, feedback loops
have been added. **Cartesian feedback loops** require the use of quadrature
amplitude modulators as a signal source for the RF amplifiers...

11/3,K/11 (Item 8 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00458056 **Image available**
VSWR CONTROL TECHNIQUE FOR TERMINAL PRODUCTS WITH LINEAR MODULATION
PROCEDE DE REGULATION DE RAPPORT D'ONDE STATIONNAIRE (ROS), EN MODULATION LINEAIRE, POUR BORNES
Patent Applicant/Assignee:
ERICSSON INC,
Inventor(s):
WYNN Stephen R,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9848520 A1 19981029
Application: WO 98US7001 19980409 (PCT/WO US9807001)
Priority Application: US 97839810 19970418
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM
GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX
NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW GH GM
KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI
FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 4038

Main International Patent Class (v7): **H04B-001/04**
Fulltext Availability:
Detailed Description
Claims

Detailed Description
... wave variation. But, the effects of variation
in voltage standing wave ratios can cause the **Cartesian feedback loop** to stretch beyond its ability to compensate. Indeed,
maintaining stability 'in the **cartesian feedback loop** is vital to its
good operation, and wide swings in voltage standing wave ratio can...
power amplifier from the same coupler that
5 provides the forward power signal to the **cartesian feedback loop** .

From the reverse power signal, the voltage standing wave ratio is detected. A control signal...Ef and Er Of
Figure 1, respectively. The forward power signal 30 is fed through **Cartesian feedback loop** 38 to the input of the modulator 22. In the example of Figure 2, the modulator 22 is a linear operation
i5 modulator and the **Cartesian feedback loop** 38 is designed to maintain that linear operation.

Meanwhile, the reverse power signal 28 from...ensures that the linearity of the
modulator 22 is maintained and the stability of the **Cartesian feedback loop** 38 is not comprised by high fluctuations 'in the voltage standing wave ratio of the...

Claim
... 26)

5 An RF device according to claim 2, wherein:
the feedback loop is a **Cartesian feedback loop** .

6 An RF device according to claim 1, wherein:
the modulator employs an amplitude variable...

...attenuator.
IO. A radio transceiver according to claim 7, wherein the feedback loop is a **Cartesian feedback loop** .
SUBSTITUTE SHEET (RULE 26)
1 1. A radio transceiver according to claim 7, wherein:
the...

11/3,K/12 (Item 9 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00421204 **Image available**
METHOD AND APPARATUS FOR DETECTING AND COMPENSATING FOR UNDESIRED PHASE SHIFT IN A RADIO TRANSCEIVER
PROCEDE ET DISPOSITIF DE DETECTION ET DE COMPENSATION DE DEPHASAGE PARASITE DANS UN TRANCEPTEUR RADIOELECTRIQUE
Patent Applicant/Assignee:
ERICSSON INC,
Inventor(s):
JONES Mark A,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9811665 A1 19980319
Application: WO 97US16168 19970912 (PCT/WO US9716168)
Priority Application: US 96714699 19960916
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU
IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL
PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW GH KE LS MW SD
SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT

LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 6605

International Patent Class (v7): **H04B-07:08**
Fulltext Availability:
Detailed Description

Detailed Description
... that the transmitted frequency
spectrum spreads out and interferes with transmissions on adjacent radio channels.

Cartesian feedback loops may be used to linearize one or more amplifiers of the transmitter amplifier chain. The...loop causing excess noise output, spurious
outputs, and/or system instability. More specifically, in a **Cartesian feedback loop** , if the phase shift were as much as 90', the demodulated
in-phase component (1...

11/3,K/13 (Item 10 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00269426
CARTESIAN MULTICARRIER FEEDBACK
BOUCLE DE REACTION A PORTEUSES MULTIPLES CARTESIENNE
Patent Applicant/Assignee:
TELEFONAKTIEBOLAGET LM ERICSSON,
Inventor(s):
SKARBY Ulf Bertil Christian,
BERGSTEN Par Seth Thure,
HEDBERG Bo,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9417599 A1 19940804
Application: WO 94SE36 19940119 (PCT/WO SE9400036)
Priority Application: US 93336 19930128
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
AU BR CA CN FI JP KR NZ AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Fulltext Word Count: 2481

Main International Patent Class (v7): **H04B-001/04**
Fulltext Availability:
Detailed Description
Claims

English Abstract
...combined, multicarrier signals is disclosed wherein combiner/filters, commonly called combiners, have been eliminated. A **cartesian feedback loop** linearizes the system and thereby supresses carrier frequency intermodulation by feeding back a portion of...

Detailed Description
... then amplified and a portion of the amplified
output signal is fed back via a **cartesian feedback loop** to the I and Q reference input basebands. This
feedback serves to suppress frequency intermodulation...of a conventional transmission system.

Figure 2 illustrates the in more detail the

modulator and **cartesian feedback loop** used in Figure 1.

Figure 3 shows a block diagram of a transmission system according...

...ensure crisp frequency separation when combined with the other signals transmitted via antenna 16. A **cartesian feedback loop** 18 samples the power output from power amplifier 18 and is used to compensate for the nonlinearities introduced by the power amplifier. operation of the **cartesian feedback loop** is discussed in more detail below with respect to Figure 2.
Figure 2 is a...

...one of the branches of the conventional system of Figure 1 which illustrates how the **cartesian feedback loop** operates, **Cartesian feedback loops** for single carrier environments are disclosed for example in "Linearization of RF Power Amplifiers Using...

...and transmitted via an antenna as discussed above with respect to Figure 1,
Aw The **cartesian feedback loop** provided in this conventional system compensates for drifts in nonlinearities introduced by the power amplifier...then amplified by the rf power amplifier 38 before being transmitted via antenna 40,
A **cartesian feedback loop** 42 samples the combined, multi-carrier signal which is then demodulated and compared with the...

...the forward transmission circuit need not be highly linear because linearity is provided by the **cartesian feedback loop** , which is readily accomplished since very little power needs to be amplified in the feedback...

...In this way, intermodulation between the various carrier frequencies is suppressed. For example, without the **cartesian feedback loop** , signals having two different carrier frequencies, fl and f 21 which were summed and input...

...f2'
2f 2@ f1j, 3f 1@ 2f21 3f2-2f,, etc.

With the provision of the **cartesian feedback loop** which provides feedback on every possible intermodulation frequency, however, the intermodulation is suppressed by the gain in the **cartesian feedback loop** . Thus, if the carrier frequencies have approximately the same separation over the total transmitted bandwidth...

...present invention by showing the bandwidth of the separated carrier frequencies as compared to the **cartesian feedback loop** bandwidth. The outer dotted ...denote the loop gain of the feedback loop. Note that the bandwidth 56 of the **cartesian feedback loop** is such that any intermodulation frequencies (e.g., frequencies between f 1 and f2) would...

...thereof. Thus, for example, other
types of adaptive feedback techniques could be
substituted for the **cartesian feedback loop** used in the
exemplary embodiments described herein. Moreover,
although the overall systems (e,g., base...

Claim
... multi-carrier signal.

2 The system of claim 2, wherein said
feedback means comprises a **cartesian feedback loop** .
3* The system of claim 1, wherein said
modulated signal is an intermediate frequency signal...

...8 The method of claim 7, wherein said
step of suppressing further comprises:
using a **cartesian feedback loop** to
feedback said portion of said combined, multi-carrier
signal.
9* The method of claim...

11/3,K/14 (Item 11 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00211084
FAST PHASE SHIFT ADJUSTING METHOD AND DEVICE FOR LINEAR TRANSMITTER
METHODE ET DISPOSITIF DE REGLAGE DE DEPHASAGE RAPIDE POUR UN EMETTEUR LINEAIRE
Patent Applicant/Assignee:
MOTOROLA INC,
Inventor(s):
GAILUS Paul Howe,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9208291 A1 19920514
Application: WO 91US6789 19910920 (PCT/WO US9106789)
Priority Application: US 90423 19901031
Designated States:
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AT AT BE CA CH DE DK ES FR GB GR IT JP KR LU NL SE
Publication Language: English
Fulltext Word Count: 7477

Main International Patent Class (v7): **H04B-001/04**
Fulltext Availability:
Detailed Description

Detailed Description
... vector is at this time substantially reduced, allowing closure
of the at least one open **cartesian feedback loop** with minimal
splatter or off channel
?